



# Hawaiian Volcano Observatory Summary 101; Part I, Seismic Data, January to December 2001

by Jennifer S. Nakata

Chronological Summary  
by C. Heliker

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## INTRODUCTION

The Hawaiian Volcano Observatory (HVO) summary presents seismic data gathered during the year and a chronological narrative describing the volcanic events. The seismic summary is offered without interpretation as a source of preliminary data. It is complete in the sense that all data for events of  $M \geq 1.5$  routinely gathered by the Observatory are included. The emphasis in collection of tilt and deformation data has shifted from quarterly measurements at a few water-tube tilt stations ("wet" tilt) to a larger number of continuously recording borehole tiltmeters, repeated measurements at numerous spirit-level tilt stations ("dry" tilt), and surveying of level and trilateration networks. Because of the large quantity of deformation data now gathered and differing schedules of data reduction, the seismic and deformation summaries are published separately.

The HVO summaries have been published in various forms since 1956. Summaries prior to 1974 were issued quarterly, but cost, convenience of preparation and distribution, and the large quantities of data dictated an annual publication beginning with Summary 74 for the year 1974. Summary 86 (the introduction of CUSP at HVO) includes a description of the seismic instrumentation, calibration, and processing used in recent years. The present summary includes enough background information on the seismic network and processing to allow use of the data and to provide an understanding of how they were gathered.

A report tabulating instrumentation, calibration, and recording history of each seismic station in the network by Klein and Koyanagi is available as a USGS Open-File Report<sup>1</sup>. It is designed as a reference for users of seismograms and phase data and includes and augments the information in the station table in this summary.

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<sup>1</sup> Klein, F.W., and Koyanagi, R.Y., 1980, Hawaiian Volcano Observatory seismic network history, 1950-1979: U.S. Geological Survey Open-File Report 80-302, 84 p.

## CHRONOLOGICAL SUMMARY 2001

by

C. Heliker

The episode 55 flow field expanded eastward in 2001, repaving coastal areas that had already been buried by Kupaianaha flows and whittling away at the large kipuka that contains Royal Gardens subdivision (fig. C-1). One long-abandoned structure in lower Royal Gardens was overrun in February 2001. Lava covered 4.7 km<sup>2</sup> in 2001, only 1.5 km<sup>2</sup> of which was virgin, vegetated land. The total area covered by lava since 1983 is 105.2 square kilometers, and the volume of lava is 2.1 cubic kilometers (dense rock equivalent). For the latest statistics, refer to table C-1.

No pauses in magma supply to the Pu'u 'O'o flank vent(s) occurred in 2001. This was the culmination of the trend of decreasing pause frequency over the last few years of episode 55 (table C-2). Three "magmatic events," however, perturbed the eruption without shutting off the flank vents. These were the near-pause in April; the May surge, which caused a marked increase in eruption flux following two inflation/deflation cycles at the summit; and the August partial-crater-floor collapse, which apparently triggered summit inflation.

It was a relatively quiet year at the ocean. Lava entered the ocean for only a few days during the first five months of 2001. The E. Kupapa'u and Kamoamoa entries were established in May and late September, respectively, and each was active until the end of the year. Both these entries formed stable benches, and no large littoral explosions were observed at either site. The shape and size of the E. Kupapa'u bench showed little change from July through the end of the year. As with other benches that have formed near or east of Waha'ula in the last few years, bench growth equaled wave attrition, making for a constant bench size and no spectacular collapses. The Kamoamoa bench was more changeable in size and shape but had only small collapses. About 5.1 hectares of new land were added to the island in 2001.

The Pu'u 'O'o crater floor topography changed only slightly in 2001. The main features of the crater floor—the inner trough and the terrace that surrounds it (fig. C-2)—are remnants of the last period of sustained lava pond activity, which took place in September-October 1999. For the first time since then, lava resurfaced the entire trough on May 20, 2001, during a surge event. This activity lasted less than a day, however, and no more flows were observed in the crater through the end of 2001.

The main active vents on the crater floor during 2001 were the July pit and the NE- and SE pond vents. These were the source of the lava erupted in May, as well as intermittent night-time glow. Small lava ponds were visible deep within the NE- and SE pond vents on March 30. These two vents apparently merged by autumn to form the E pond vent, where a single pond was visible September 13 and again on November 16. Crater observations in the interim were dogged by heavy fume, so we don't know if the pond was continuously present or not. On August 25, the July pit was engulfed by a small crater-floor collapse event but continued to produce intermittent glow.

Puka Nui, the composite collapse pit that is consuming the southwest flank of Pu'u 'O'o (fig. C-2), continued to grow during 2001. An inner collapse pit on the east edge of Puka Nui formed at the beginning of May and doubled by the end of the month. During the same interval, the crater rim at the upper edge of Puka Nui gave way, forming a large red-rock slide and a new notch in the rim. Matching red talus on the inside of the crater below the same notch was observed on an exceptionally clear day in February 2002.

Lua Hou, a small pit on the shield just south of Puka Nui (fig. C-2), was first seen in February 2001. Flowing lava was seen at the bottom of it following the February 2000 intrusion, and the pit was floored by pond lava or, incandescence was seen, frequently through September 2000. Since then, active ponded lava was seen only once, on March 30, 2001. No activity or glow was seen at the West Gap pit in 2001.

**Table C-1. Eruption Statistics**

**Areas**

Total area covered by lava, 3/83 - 12/31/01: **105.2 km<sup>2</sup>** (40.6 mi<sup>2</sup>)

<b>Episode</b>	<b>Area originally covered</b>	<b>Area exposed, 12/31/01</b>
<b>1-48b</b> (mostly Pu'u 'O'o)	42 km <sup>2</sup>	17.7 km <sup>2</sup>
<b>48</b> (Kupaianaha)	41	34.7
<b>49</b> (between Pu'u 'O'o & Kupaianaha)	3.9	3.9
<b>50</b> (Pu'u 'O'o flank vents)	1.0	0.2
<b>51-52</b> (Pu'u 'O'o flank vents)	12.3	0.8
<b>53</b> (Pu'u 'O'o flank vents)	19.4	10.7
<b>54</b> (in & NE of Napau Crater)	0.24	0.24
<b>55</b> (Pu'u 'O'o flank vents)	37	37
New (vegetated) territory covered in 2001:	1.5 km <sup>2</sup>	

**Net total of new land created, Nov 86 - Dec 2001: 212 hectares (524 acres) #**

**Net new land created during 2001: ~5.1 hectares (12.6 acres)**

#These figures do not include new land that was claimed by wave erosion or collapse of the active lava bench. Due to these processes, mapping in 1998 and 1999 revealed a decrease in total acreage.

**Volumes**

Total, 1/83 thru 12/01 Approximately: **2.1 km<sup>3</sup>** (dense rock equivalent)

<b>Episodes 1-48b</b> (1/83 - 7/86)	<b>391 x 10<sup>6</sup> m<sup>3</sup></b>
<b>Episode 48</b> (7/86 - 2/92)	<b>500 x 10<sup>6</sup> m<sup>3</sup></b>
<b>Episode 49</b> (11/91)	<b>11 x 10<sup>6</sup> m<sup>3</sup></b>
<b>Episode 50</b> (2/92 - 3/92)	<b>4.5 x 10<sup>6</sup> m<sup>3</sup></b>
<b>Episode 51-52</b> (3/92 - 2/93)	<b>34 x 10<sup>6</sup> m<sup>3</sup></b>
<b>Episode 53</b> (2/93 - 1/97)	<b>535 x 10<sup>6</sup> m<sup>3</sup></b>
<b>Episode 54</b> (1/97)	<b>0.3 x 10<sup>6</sup> m<sup>3</sup></b>
<b>Episode 55</b> (2/97 - ongoing)	<b>667 x 10<sup>6</sup> m<sup>3</sup></b>

**Other fascinating facts**

Height of Pu'u 'O'o cone: **~187 m** (613 ft) Cone has lost **68 m** due to collapse since 1986

Dimensions of Pu'u 'O'o crater: **~250 m x 400 m**

Depth of Pu'u 'O'o crater floor (terrace around the inner trough), Dec 2001: **~40 m**

Dimensions of Episode 50-55 lava shield: **1.8 x 0.8 km**

Height of Episode 50-55 lava shield: **~80 m**

Height of Kupaianaha lava shield: **56 m**

Kupaianaha vent inactive since Feb 92

Thickness of lava at the coast:

**~15-25 m** (50-80 ft) over Kalapana Gardens

**~25 m** (80 ft) over Chain of Craters Rd at Kamoamoa

Highway covered by lava flows from this eruption: **13 km** (8 mi)

**Structures destroyed**

Structures destroyed in 2001: **1** (Royal Gardens)

Total structures destroyed since 1983: **188**

Total losses: **\$61 million**

**Table C-2. Episode 55 eruptive pauses and other magmatic events**

<b>Ep 55 pause #</b>	<b>Start date &amp; time, Hst</b>	<b>End date &amp; time</b>	<b>Length, hrs</b>
1	5/03/97 0000	5/03/97 0530	5.5
2	5/10/97 0700	5/10/97 1230	5.5
3	5/11/97 2000	5/12/97 0600	10
4	5/12/97 2139	5/13/98 0030	3
5	5/14/97 0200	5/14/97 0700	5
6	5/23/97 0630	5/23/97 2134	15
7	5/27/97 0430	5/27/97 0654	2.5
8	6/06/97 2330	6/07/97 1005	10.5
9	6/16/97 1600	6/16/97 2027	4.5
10	6/17/97 1010	6/18/97 ~0530	19.5
11	1/15/98 1030	1/16/98 1100	24.5
12	1/26/98 1130	1/27/98 0600	18.5
13	2/21/98 0000	2/21/98 2400	24
14	3/02/98 0400	3/02/98 1600	12
15	3/09/98 1400	3/10/98 0800	18
16	4/04/98 0400	4/05/98 0041	20.5
17	5/19/98 0350	5/20/98 2230	42.5
18	6/19/98 ~1400	6/20/98 ~0100	11
19	7/16/98 2100	7/19/98 0200	53
20	8/12/98 ~1500	8/14/98 ~0930	42
21	11/07/98 ~0600	11/08/98 ~1000	28
22	2/06/99 0400-0800	2/07/99 ~0300	19-23
23	5/04/99 ~1300	5/05/99 ~2200	33
24	6/14/99 0010	6/17/99 2300	95
25	8/21/99 ~2000	8/22/99 ~2000	24
26 INTRUSION	9/12/99 0131	9/23/99 1100	273.5
27	10/03/99 ~2200	10/05/99 0900	35
28	11/07/99 1400	11/08/99 1015	20.25
29	11/11/99 ~1530	11/14/99 1030	67
INTRUSION	2/23/00 1342	NO PAUSE	
30	8/23/00 ~2300	8/26/00 ~1900	68
Dog Day SURGE	9/24/00	9/25/00	
31	12/15/00 1715	12/17/00 ~0200	~33
SLOWDOWN	4/05/01	4/08/01	
SURGE	5/20/01	5/23/01 two summit tilt cycles	
Crater/summit	8/25/01	8/25/01 small crater-floor collapse	

Fig. C-1 The eruption site, showing flows emplaced from December 17, 2000 through December 2001, and tubes and ocean entries active in 2001. Kmm, Kamoamoa.

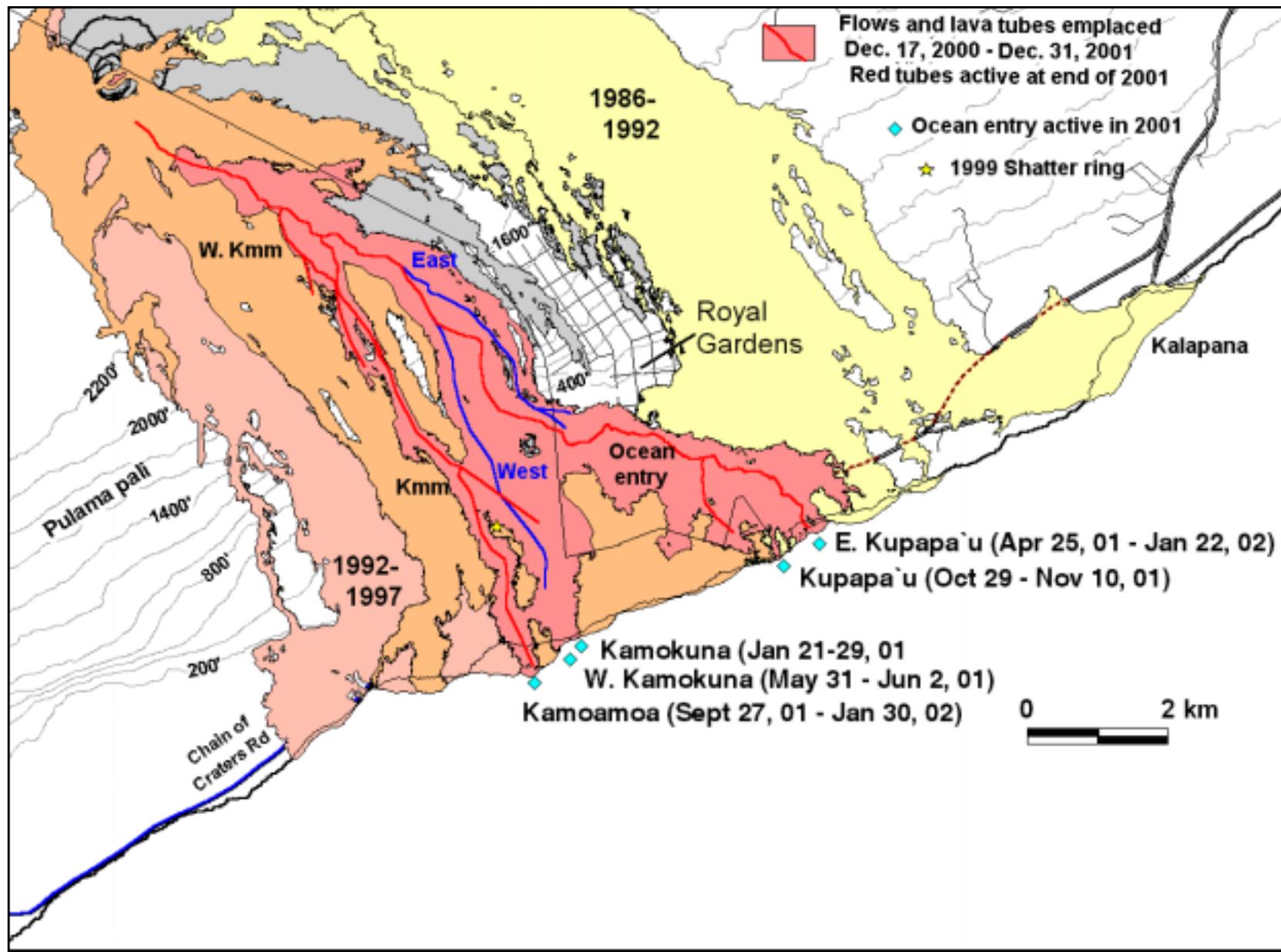
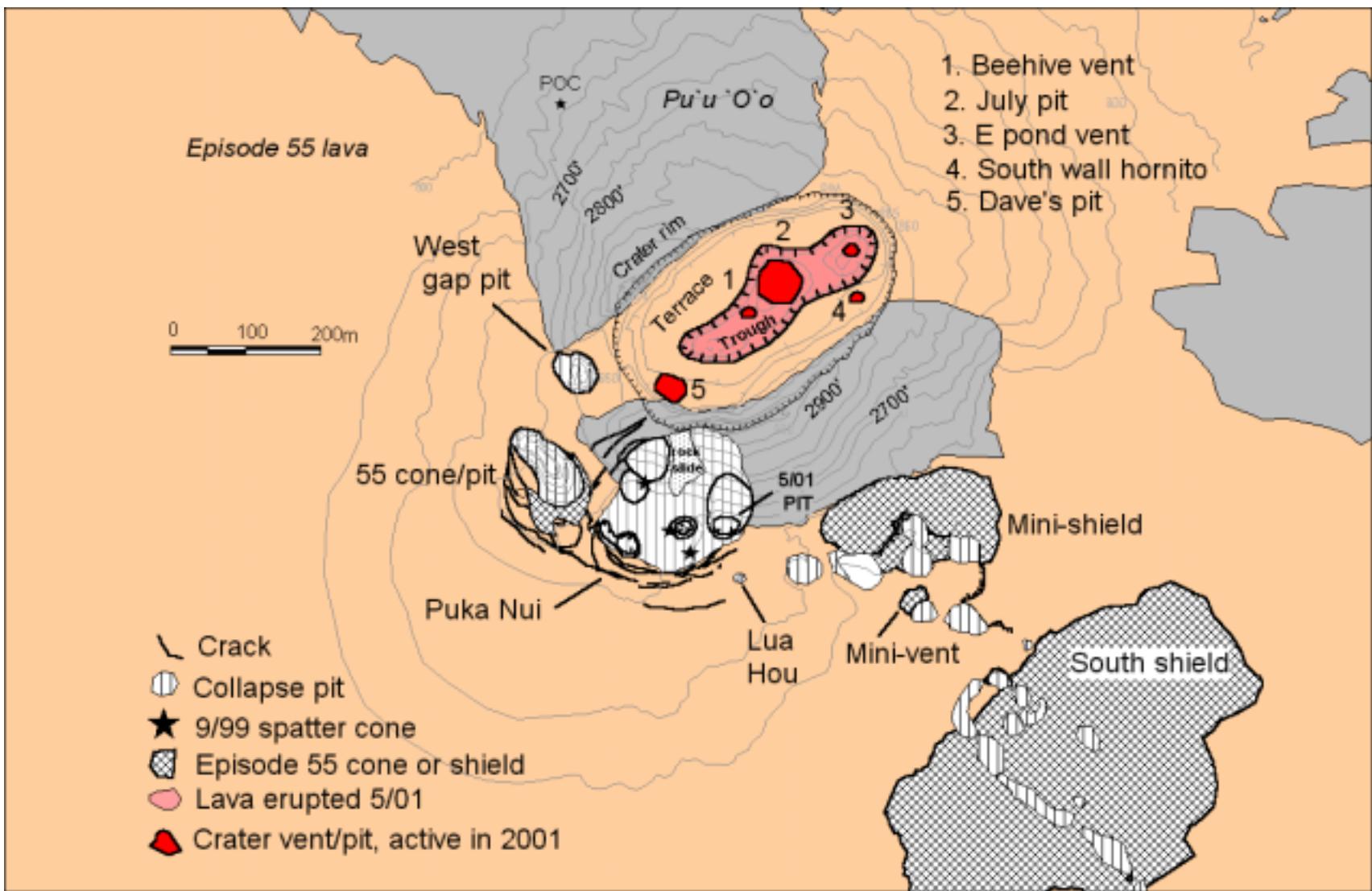


Fig. C-2 Pu'u 'O'o cone and surroundings, November 2001.

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## SEISMIC INSTRUMENTATION

The network. The Hawaiian Volcano Observatory maintains an extensive telemetered seismic network on the Island of Hawai'i. The standard HVO field sensors, 1-Hz geophones, are deployed as single-component, vertical-only units or as three-component combinations of one vertical and two orthogonal horizontal units. The 2001 network consisted of 49 station sites: 10 three-component, 2 six-component (which included a three-component Kinematic Force-Balance accelerometer), one four-component (which included a low-gain vertical with a unity gain setting), one four-component and two two-component (each site included a moderate-gain vertical with a 48db setting), and 33 vertical-component-only sites. The coverage is most dense on and around Kilauea Volcano. During 1999 HVO added to the network three vertical-component-only sites on the Island of Maui. All seismic signals from the network are telemetered in real time to the Observatory for recording.

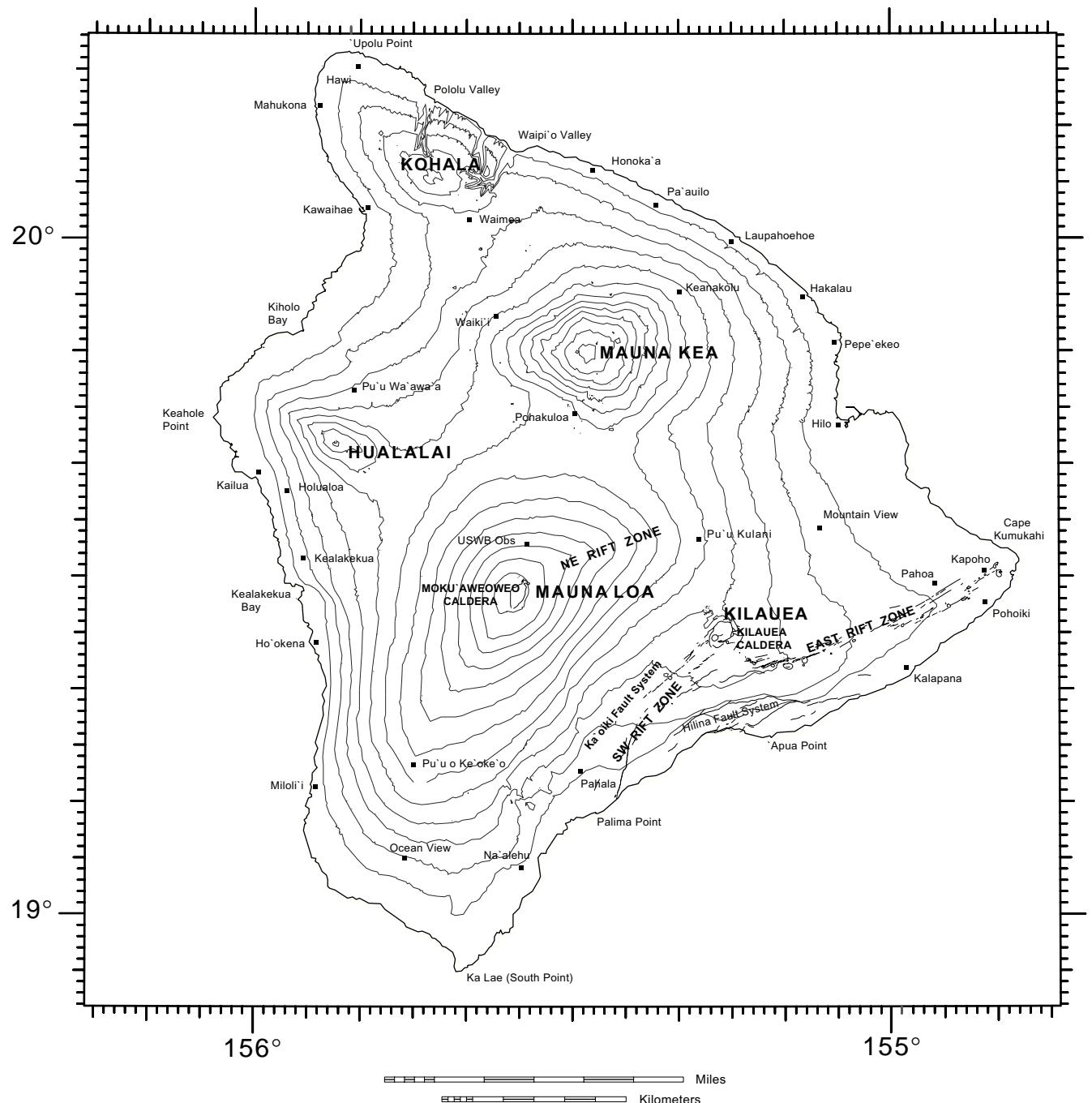
The Pacific Tsunami Warning Center (NOAA) operates and maintains a network of stations on the islands of Hawai'i, Maui, and O'ahu. In 1999, radio links were established to share data, in real-time, between PTWC and HVO. PTWC signals from one O'ahu three-component station, and one Maui and four Hawai'i vertical-component-only stations, were telemetered to the Observatory for recording.

Figure 1 is a map of selected geographic and geologic features. Figure 2 shows the sites of seismic stations operated by HVO and PTWC on the Island of Hawai'i during 2001. Figure 3 indicates the telemetry scheme for the seismic stations on Hawai'i Island, and figures 4a and 4b are expanded views of the telemetry schemes at Kilauea summit: 4a, HVO seismic stations and 4b, broadband network installed by Menlo Park and maintained by HVO. Figure 5 indicates the telemetry scheme for the seismic stations on Maui Island.

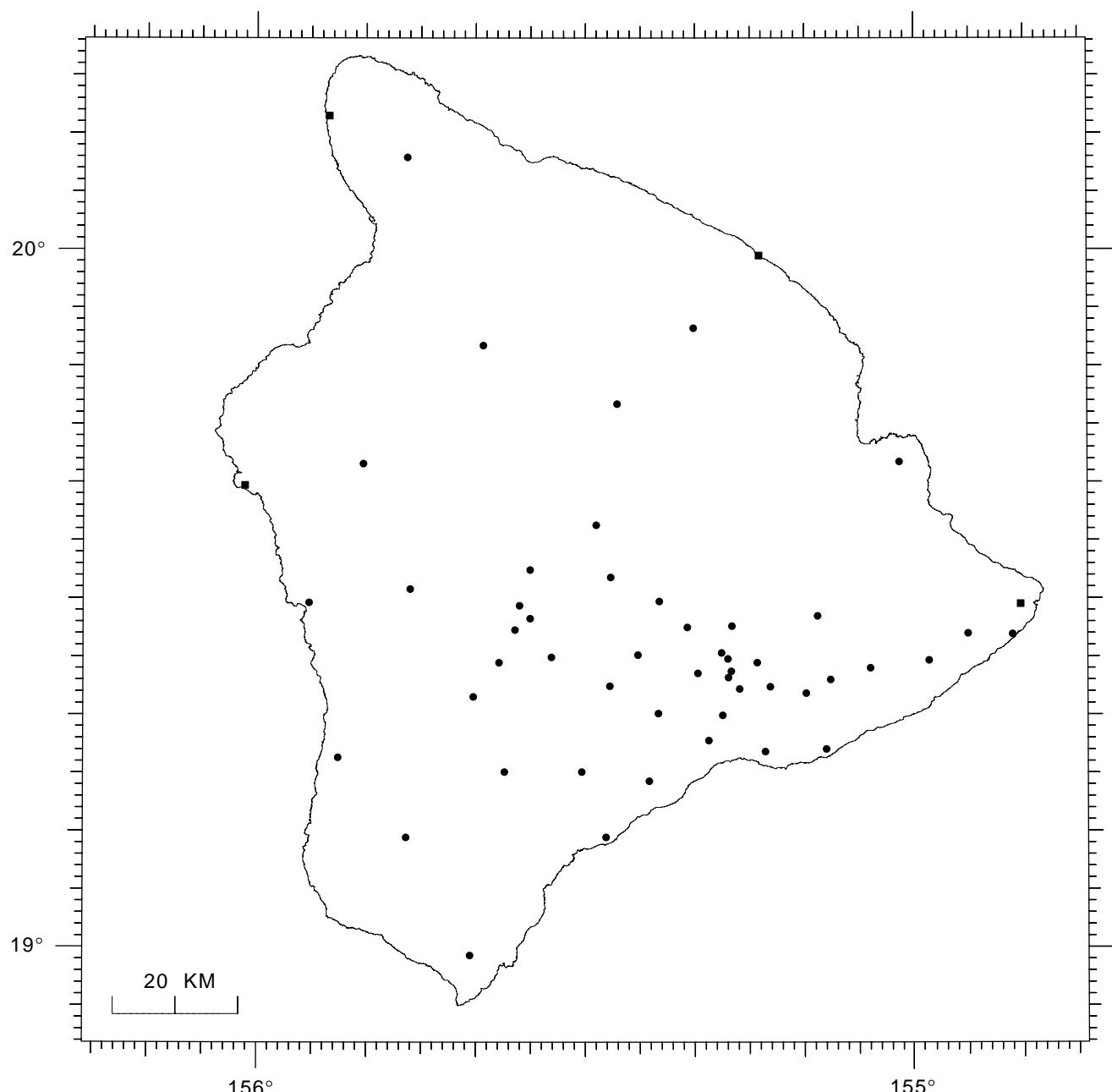
Table 1 lists seismic stations by names, four-letter station codes, coordinates in degrees and minutes (old Hawaiian datum), elevation in meters, and other data, as described below, pertaining to each station. The list includes all the stations operated by HVO during 2001. Seismic stations operated by PTWC on the Islands of Hawai'i, O'ahu and Maui are also listed. Phase times from PTWC stations, not telemetered to HVO, are used to supplement local earthquakes and earthquakes that occur within the Hawaiian Archipelago but distant from the Hawai'i Island network.

Instrumentation and recording. Each telemetered station's data channel has a voltage-controlled oscillator (VCO) for FM multiplex transmission to HVO via radio. These telemetering stations are all of Type 1, Earthquake Hazards Team (EHT) standard system used in USGS seismic networks (see table 2 for details). After discrimination at the receiver, the analog signals are converted to digital form as part of the routine computer location processing and archiving. Through July 2001, continuous signals from the telemetered network were saved on 4-mm digital-audio tape (DAT) recording units. Three DAT recorders ran in automatic rotation, as each ~20-hr tape was filled. Optic recordings are coded in table 1 as follows: H - Helicorder paper, and I - ink paper. DAT and paper records are archived at HVO.

Seismograph response and calibration. Displacement response curve for the short-period seismograph type in use is given in figure 6. The Type 1 curve gives the displacement magnification of the standard EHT system from ground motion at the seismometer to the seismic trace, as seen on a 20x Developcorder film viewer. The curve plots the unit response, which is multiplied by a constant but known factor, CAL, to get the response for an individual station. Individual CAL factors for Type 1 seismographs are Developcorder equivalent peak-to-peak amplitudes, measured in millimeters, of a 100-microvolt 5 to 8-Hz signal introduced to the preamp/VCO in place of the geophone at the field station. The calibration process is normally performed each time a station is visited for other required maintenance.

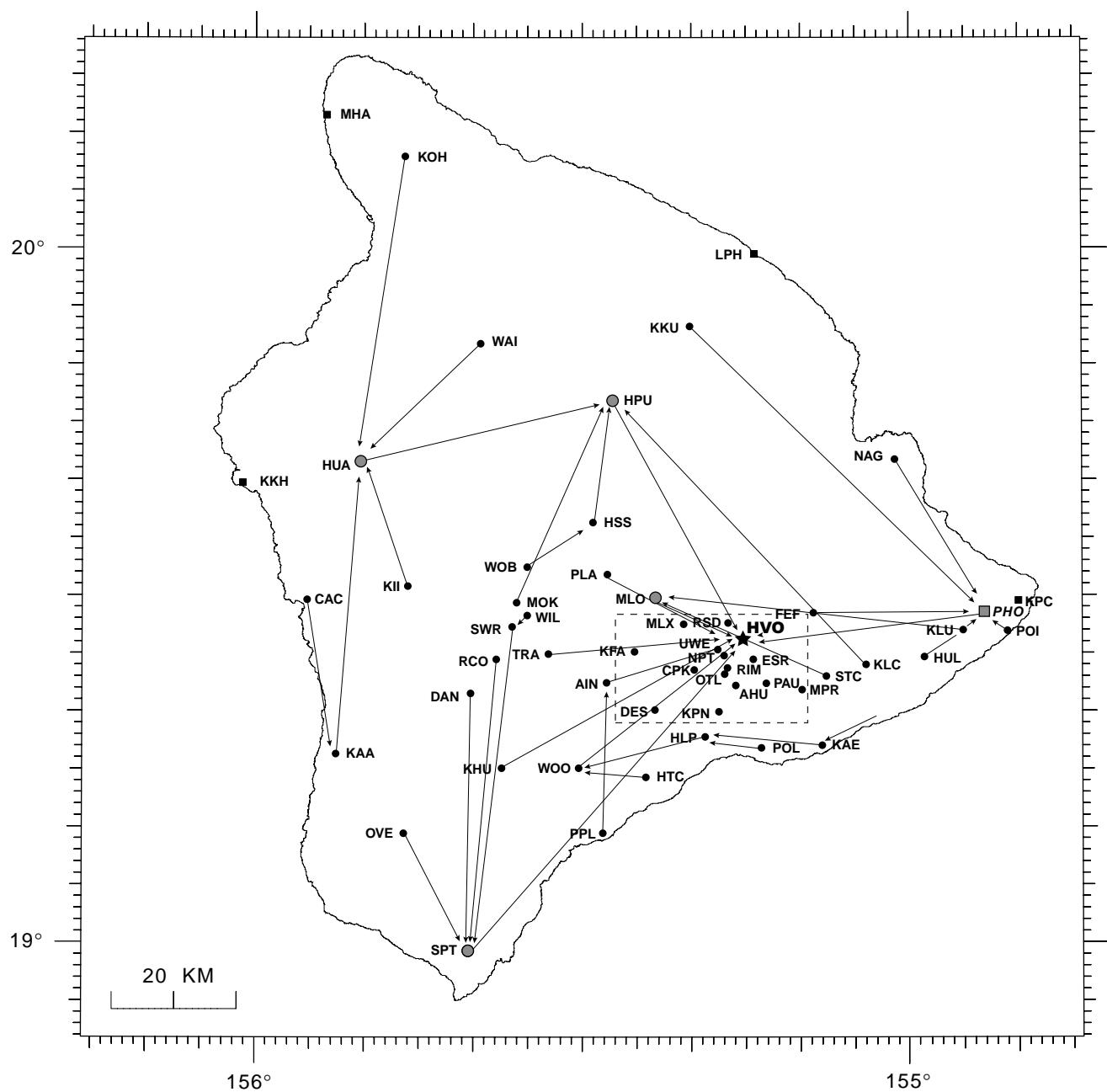


**Figure 1.** Map of the Island of Hawai'i, showing principal settlements and selected geographic and geologic features.



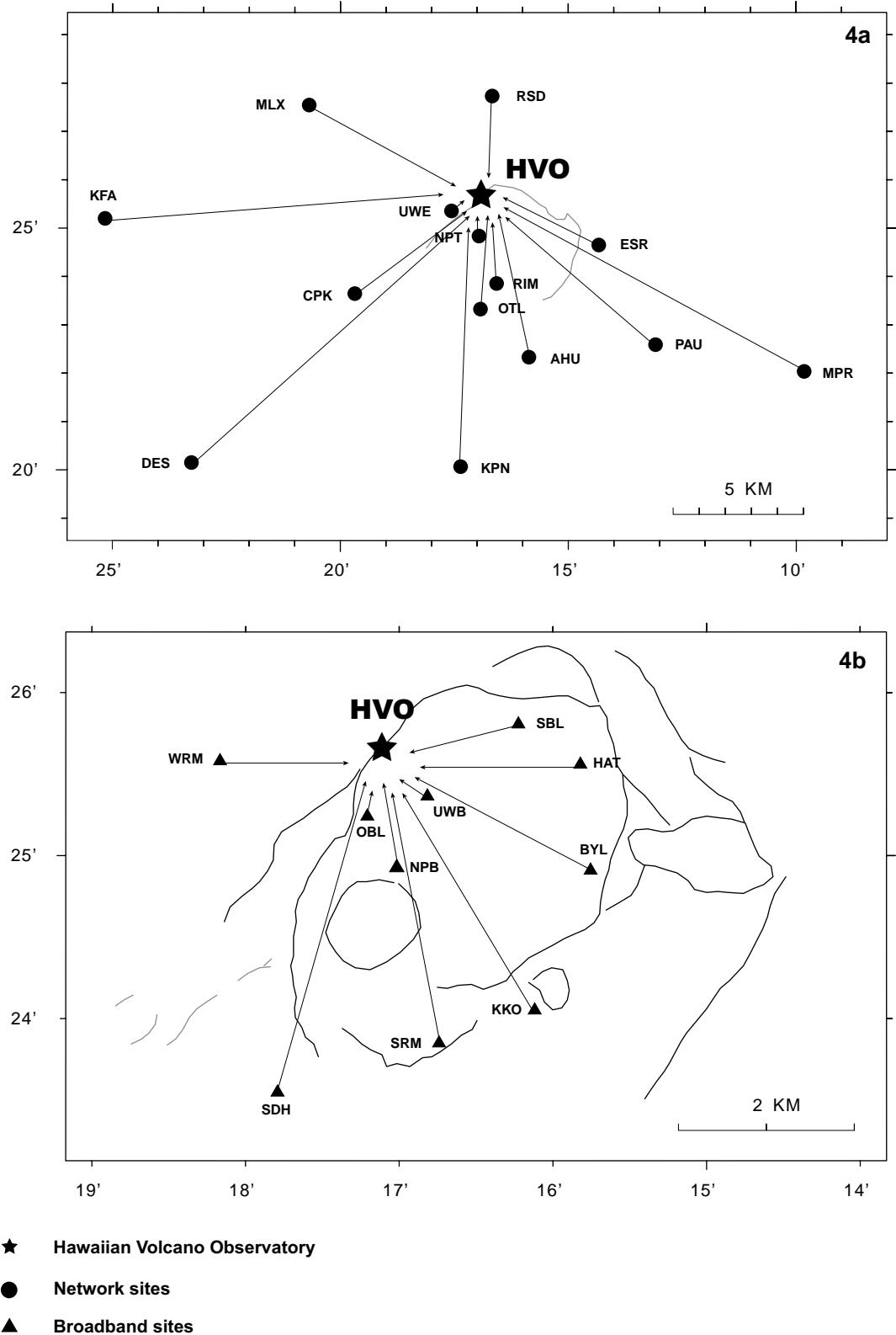
- Network sites
- PTWC station sites

**Figure 2.** Seismic station sites operated by the USGS and NOAA on Hawai'i Island during 2001 on the Island of Hawai'i.



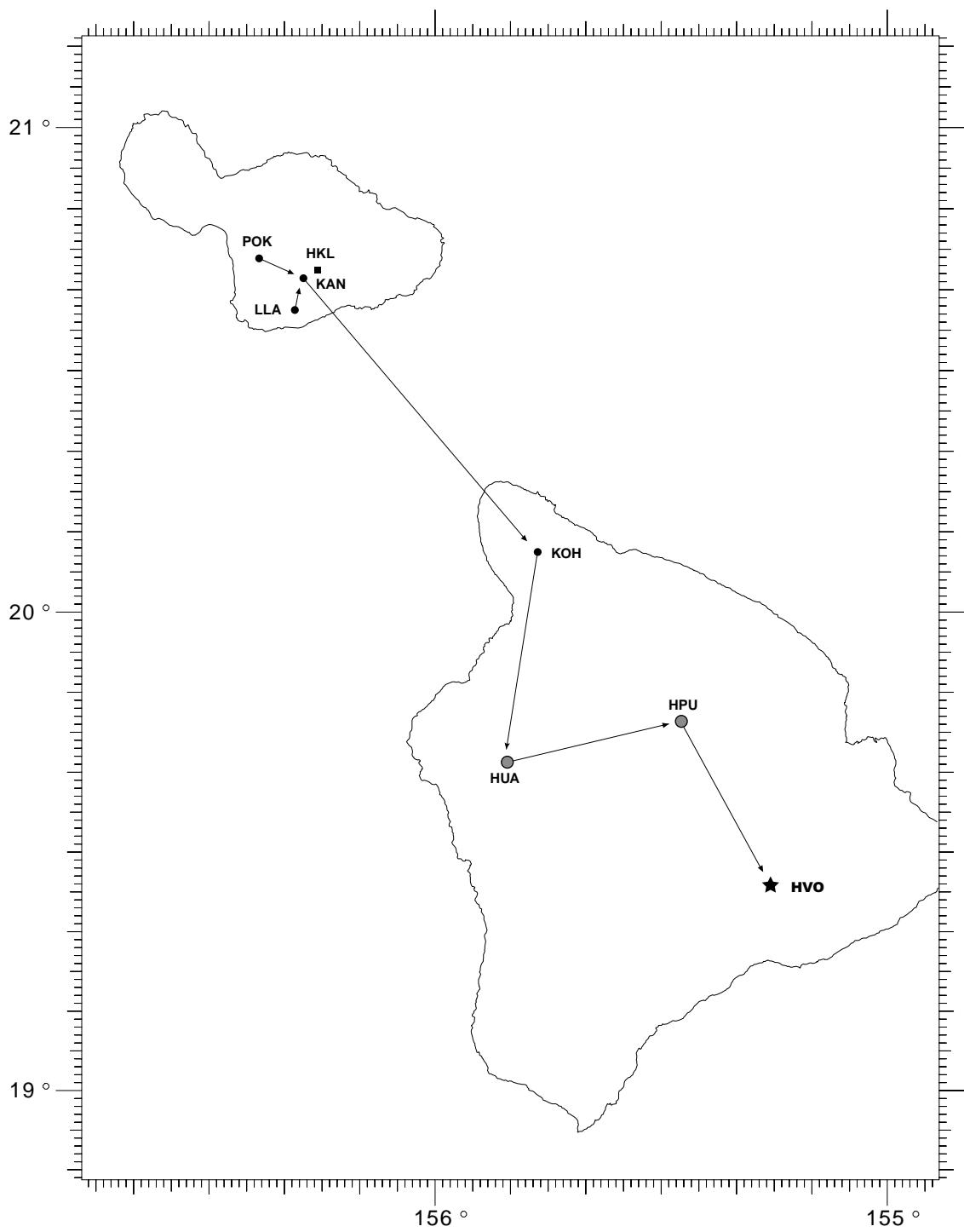
- ★ Hawaiian Volcano Observatory
- Network sites
- Direct-to-Line 32 Channel
- Direct-to-Line 32 Channel repeater sites
- Inset Kilauea Summit
- PTWC station sites

**Figure 3.** Telemetry scheme for seismic stations operational during 2001 on the Island of Hawai‘i.



**Figure 4a.** Expanded telemetry scheme for the 2001 Hawaiian Volcano Observatory seismic network at Kilauea summit.

**Figure 4b.** Expanded telemetry scheme for the 2001 Menlo Park broadband network at Kilauea summit.



- ★ Hawaiian Volcano Observatory
- Network station sites
- Direct-to-Line 32 Channel
- PTWC station sites

**Figure 5.** Telemetry scheme for seismic stations operational during 2001 on the Island of Maui.

**Table 1. Seismic stations in Hawai'i operated by the USGS in 2001.**

STATION NAME	CODE	-LAT-		-LON-		ELEV (M)	DELAY 1	DELAY 2	CAL	SEIS	OPTIC TYPE	RECORD
		D	M	D	M							
AHUA	AHUV	19	22.40	155	15.90	1070	-0.10	-0.13	2.6	L5	I	
AHUA	AHUE	19	22.40	155	15.90	1070	-0.10	-0.13	3.0	E5	MW	
AHUA	AHUN	19	22.40	155	15.90	1070	-0.10	-0.13	3.0	E5	MW	
AINAPO	AINV	19	22.50	155	27.62	1524	0.13	0.17	6.8	L5		
AINAPO	AINE	19	22.50	155	27.62	1524	0.13	0.17	3.0	L5	MW	
AINAPO	AINN	19	22.50	155	27.62	1524	0.13	0.17	3.0	L5	MW	
AINAPO	AINZ	19	22.50	155	27.62	1524	0.13	0.17	0.0	L5		
CAPTAIN COOK	CACV	19	29.29	155	55.09	323	0.00	-0.16	1.1	L5		
CONE PEAK	CPKV	19	23.70	155	19.70	1038	-0.26	-0.07	6.0	L5		
DANDELION	DANV	19	21.42	155	40.04	3003	-0.27	0.03	4.3	E5		
DESERT	DESV	19	20.20	155	23.30	815	-0.29	-0.13	4.5	L5	I	
DIAMOND HD, OAHU	DHHZ	21	16.12	157	48.25	137	0.00	0.00	0.0	S13		
ESCAPE ROAD	ESRV	19	24.68	155	14.33	1177	-0.17	-0.19	1.2	L5		
FERN FOREST	FEFV	19	28.70	155	8.91	691	0.01	0.05	0.0	L5		
HEIHEIAHULU	HHAZ	19	25.13	154	58.72	369	-0.17	-0.16	0.0	F5		
HEIHEIAHULU	HHAE	19	25.13	154	58.72	369	-0.17	-0.16	0.0	F5		
HEIHEIAHULU	HHAN	19	25.13	154	58.72	369	-0.17	-0.16	0.0	F5		
HALEAKALA, MAUI	HKLZ	20	42.63	156	15.55	3051	0.00	0.00	0.0	S13		
HILINA PALI	HLPV	19	17.96	155	18.63	707	0.02	0.07	2.1	L5		
HONOLULU, OAHU	HONZ	21	19.30	158	0.50	2	0.00	0.00	0.0	S13		
HONOLULU, OAHU	HONE	21	19.30	158	0.50	2	0.00	0.00	0.0	S13		
HONOLULU, OAHU	HONN	21	19.30	158	0.50	2	0.00	0.00	0.0	S13		
HONUAPO	HPOZ	19	5.34	155	33.23	15	0.00	0.00	0.0	S13		
HALE POHAKU	HPUV	19	46.85	155	27.50	3396	0.31	0.17	3.3	L5		
HUMUJULA SHEEP ST	HSSV	19	36.31	155	29.13	2445	0.20	0.35	4.0	L5		
HUMUJULA SHEEP ST	HSSE	19	36.31	155	29.13	2445	0.20	0.35	3.0	L5	MW	
HUMUJULA SHEEP ST	HSSN	19	36.31	155	29.13	2445	0.20	0.35	3.0	L5	MW	
HOT CAVES	HTCV	19	14.33	155	24.02	381	-0.16	-0.07	2.3	E4		
HUALALAI	HUAV	19	41.25	155	50.32	2189	0.67	0.38	2.8	L5		
HEIHEIAHULU	HULV	19	25.13	154	58.72	369	-0.17	-0.16	1.6	L5	H	
HEIHEIAHULU	HULE	19	25.13	154	58.72	369	-0.17	-0.16	3.0	E5	MW	
HEIHEIAHULU	HULN	19	25.13	154	58.72	369	-0.17	-0.16	3.0	L5	MW	
KAAPUNA	KAAV	19	15.98	155	52.28	524	-0.12	-0.01	3.3	E5		
KAENA POINT	KAEV	19	17.35	155	7.95	37	-0.01	0.06	1.4	L5		
KANAHAU, MAUI	KANV	20	41.60	156	17.48	2745	0.00	0.00	0.0	L5		
KAOIKI FAULTS	KFAV	19	25.25	155	25.18	1579	0.13	0.17	0.0	L5		
KAHUKU	KHUV	19	14.90	155	37.10	1939	0.03	-0.03	5.0	E5		
KANEKII	KIIV	19	30.56	155	45.90	1841	0.15	0.37	3.0	L5		
KANEKII	KIIE	19	30.56	155	45.90	1841	0.15	0.37	3.0	L5	MW	
KANEKII	KIIN	19	30.56	155	45.90	1841	0.15	0.37	3.0	L5	MW	
KIPAPA, OAHU	KIPZ	21	25.40	158	0.90	2	0.00	0.00	0.0	S13		
KAILUA, KONA	KKHZ	19	39.40	156	1.12	1	0.00	0.00	0.0	S13		
KEANAKOLU	KKUV	19	53.39	155	20.58	1863	0.68	0.24	3.3	L5		
KALALUA CONE	KLCV	19	24.35	155	4.08	659	-0.25	-0.30	3.4	L5		
PUU KALIU	KLUV	19	27.48	154	55.26	271	-0.17	-0.30	3.4	L5		
KOHALA	KOHV	20	7.69	155	46.77	1166	-0.03	-0.17	6.3	L5		
KOHALA	KOHE	20	7.69	155	46.77	1166	-0.03	-0.17	3.0	L5	MW	
KOHALA	KOHN	20	7.69	155	46.77	1166	-0.03	-0.17	3.0	L5	MW	
KAPOHO CONE	KPCZ	19	30.02	154	50.51	134	0.00	0.00	0.0	S13		
KIPUKA NENE	KPNV	19	20.10	155	17.40	924	-0.11	-0.08	3.5	L5		
LUALAILUA, MAUI	LLAV	20	37.62	156	18.62	683	0.00	0.00	0.0	L5		
LAUPAHOEHOE	LPHZ	19	59.82	155	14.58	1	0.00	0.00	0.0	S13		
MAHUKONA	MHAZ	20	11.27	155	54.18	1	0.00	0.00	0.0	S13		

STATION NAME	CODE	-LAT-		-LON-		ELEV (M)	DELAY 1	DELAY 2	CAL	SEIS	TYPE	OPTIC RECORD
		D	M	D	M							
MAUNA LOA	MLOV	19	29.80	155	23.30	2010	0.03	0.08	5.6	L5		I
MAUNA LOA	MLOE	19	29.80	155	23.30	2010	0.03	0.08	3.0	L5	MW	
MAUNA LOA	MLON	19	29.80	155	23.30	2010	0.03	0.08	3.0	L5	MW	
MAUNA LOA X	MLXV	19	27.60	155	20.70	1475	0.06	0.15	3.0	L5		
MOKUAWEOWEO	MOKV	19	29.28	155	35.98	4104	0.15	0.16	4.2	L5		IH
MAKAOPUHI	MPRV	19	22.07	155	9.85	881	-0.17	-0.20	2.6	L5		I
MAKAOPUHI	MPRZ	19	22.07	155	9.85	881	-0.17	-0.20	0.1	L5		
NATIONAL GUARD	NAGV	19	42.12	155	1.72	18	0.54	0.30	4.0	R5		
NATIONAL GUARD	NAGE	19	42.12	155	1.72	18	0.54	0.30	3.0	R5	MW	
NATIONAL GUARD	NAGN	19	42.12	155	1.72	18	0.54	0.30	3.0	R5	MW	
NORTH PIT	NPTV	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	L5		I
NORTH PIT	NPTE	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	L5	MW	
NORTH PIT	NPTN	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	L5	MW	
OPANA, OAHU	OPAZ	21	41.45	158	0.70	100	0.00	0.00	0.0	S13		
OUTLET	OTLV	19	23.38	155	16.94	1038	-0.19	-0.18	2.6	L5		
OUTLET	OTLZ	19	23.38	155	16.94	1038	-0.19	-0.18	0.0	L5		
OCEANVIEW ESTATE	OVEV	19	9.21	155	45.92	1378	0.00	0.00	0.0	L5		
PAUAHI	PAAZ	19	22.62	155	13.10	994	-0.21	-0.24	0.0	F5		
PAUAHI	PAAE	19	22.62	155	13.10	994	-0.21	-0.24	0.0	F5		
PAUAHI	PAAN	19	22.62	155	13.10	994	-0.21	-0.24	0.0	F5		
PAUAHI	PAUV	19	22.62	155	13.10	994	-0.21	-0.24	2.9	L4		
PAUAHI	PAUE	19	22.62	155	13.10	994	-0.21	-0.24	3.0	L5	MW	
PAUAHI	PAUN	19	22.62	155	13.10	994	-0.21	-0.24	3.0	L5	MW	
PUU ULAULA	PLAV	19	32.00	155	27.67	2992	-0.03	0.13	6.3	L5		I
POHOIKI	POIV	19	27.42	154	51.22	16	-0.09	-0.24	0.0	L5		
PUUOKALI, MAUI	POKV	20	44.00	156	23.32	511	0.00	0.00	0.0	L5		
POLIOKEAWE PALI	POLV	19	17.02	155	13.47	169	-0.02	0.03	3.4	E5		
PUU PILI	PPLV	19	9.50	155	27.87	35	-0.15	-0.15	1.4	E5		
RED CONE	RCOV	19	24.36	155	37.79	3601	0.00	0.00	0.0	L5		
RIM	RIMV	19	23.90	155	16.60	1128	-0.21	-0.13	0.0	L5		
RAINSHED	RSDV	19	27.78	155	16.68	1270	0.06	0.15	0.0	L5		
SOUTH POINT	SPTV	18	58.91	155	39.92	244	-0.17	-0.22	2.8	L5		
SOUTH POINT	SPTE	18	58.91	155	39.92	244	-0.17	-0.22	3.0	L5	MW	
SOUTH POINT	SPTN	18	58.91	155	39.92	244	-0.17	-0.22	3.0	L5	MW	
STEAM CRACKS	STCV	19	23.30	155	7.67	765	-0.25	-0.30	3.4	L5		H
STEAM CRACKS	STCE	19	23.30	155	7.67	765	-0.25	-0.30	3.0	L5	MW	
STEAM CRACKS	STCN	19	23.30	155	7.67	765	-0.25	-0.30	3.0	L5	MW	
SOUTHWEST RIFT	SWRV	19	27.26	155	36.30	4048	0.01	0.04	5.6	E5		
TRAIL	TRAV	19	24.91	155	32.96	3207	0.00	0.00	0.0	L5		
UWEKAHUNA	URAV	19	25.40	155	17.60	1240	-0.21	0.00	0.0	R5		
UWEKAHUNA	URAE	19	25.40	155	17.60	1240	-0.21	0.00	3.0	R5	MW	
UWEKAHUNA	URAN	19	25.40	155	17.60	1240	-0.21	0.00	3.0	R5	MW	
UWEKAHUNA	UUGZ	19	25.40	155	17.60	1240	0.00	0.00	0.0	L0		
WAIKII	WAIV	19	51.58	155	39.60	1433	0.20	0.35	0.0	L5		
WILKES CAMP	WILV	19	28.15	155	35.02	4037	0.22	0.17	2.6	E5		
WILKES CAMP	WILE	19	28.15	155	35.02	4037	0.22	0.17	3.0	L5	MW	
WILKES CAMP	WILN	19	28.15	155	35.02	4037	0.22	0.17	3.0	L5	MW	
WAIMANALO RG,OAHU	WMRZ	21	19.22	157	40.94	200	0.00	0.00	0.0	S13		
WEATHER OBSERV	WOBV	19	32.31	155	35.01	3396	0.00	0.00	0.0	E5		
WOOD VALLEY	WOOV	19	15.08	155	30.12	909	-0.15	-0.06	2.6	E5		

**Table 2. Seismic instrument types**

The codes in parentheses refer to the seismometer types listed in Table 1.

Type 1 (Codes E, L, R, and 4, 5) consists of:

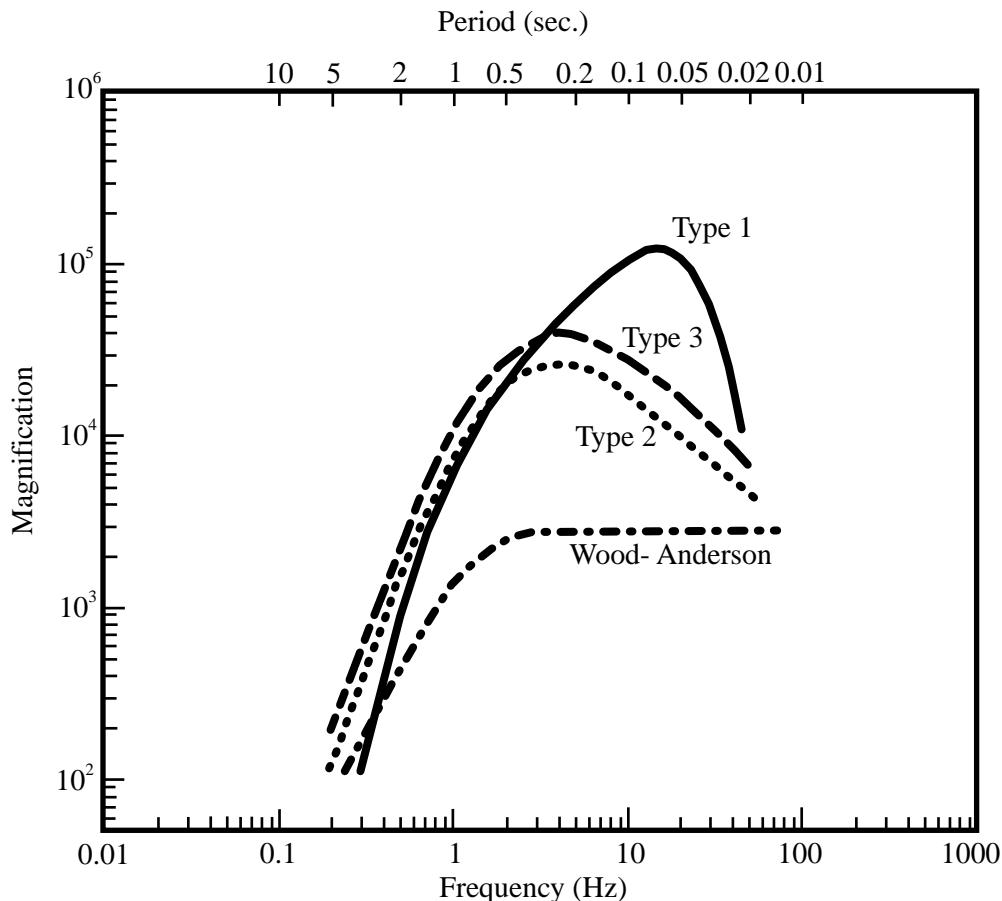
- a) Geophone - Electrotech EV-17 (E), Mark Products L4C (L) or Kinematic Ranger SS1 (R). (L) and (R) are 1.0-sec. period moving-magnet vertical- or horizontal- (E-W and N-S) component seismometers adjusted for an output of 0.5 volts/cm/sec and 0.8, critically damped.
- b) Preamp/VCO - USGS/OEVE Model J402 (4), J502 (5) voltage-controlled oscillator. Three db points for bandpass filter at 0.1 Hz and 30 Hz. Signals are transmitted on audio FM carrier over cable or FM radio link to HVO.

Code (W) - Wood-Anderson torsion seismograph.

Code (MW) - Horizontal-component seismograph based on a Type 1 system and modified to 3x a Wood-Anderson response.

Code (F) - Kinematic Force-Balance Accelerometer (FBA23).

Code (S13) - Geotech, 1Hz seismometer with A1 VCO operated by the Pacific Tsunami Warning Center.



**Figure 6.** System-response curves for the Wood-Anderson torsion seismograph and for seismometers used by the Hawaiian Volcano Observatory. Type 1 is the standard OEVE seismometer system recorded on Develocorder film and DAT tape. The curve for Type 1 includes response of the geophone, all electronics including telemetry, Develocorder galvanometer, and projection of film by a 20x viewer. The curve plots the unit response, which should be multiplied by a constant but known factor (CAL) to get the response for an individual station.

## SEISMIC DATA PROCESSING

Due to age and high cost of maintenance, Developcorder 'A' was discontinued on August 1, 1997. Daily count of classified microearthquakes from source regions around Kilauea and Mauna Loa, and duration of tremor, were also discontinued. Coda duration, however, is measured in seconds from drum (ink or helicorder) records to determine a coda magnitude that is entered as an external magnitude in the final solution.

In 1986, HVO acquired a VAX 11-750 computer and adopted the CUSP ([California Institute of Technology USGS Seismic Processing](#)) routine. Discriminated analog signals are converted to digital form, and detected events are saved in real time. Detected events are demultiplexed, and P-picks are made by the computer, producing a rough location. Events are examined by an analyst, on a graphics terminal, to refine computer P-picks and to time additional P- and S-phases for a preliminary location. Binary CUSP files are archived on magneto-optical media and translated into ASCII phase files. Locations and amplitude magnitudes are then determined, using the program HYPOINVERSE-2000 (Klein)<sup>2</sup>. Events are reworked and rerun, as needed, to produce a final solution. Magneto-optical copies of arrival times and output summary data are kept at HVO.

In July 1992, HVO acquired VAX workstations for timing earthquakes using a "generic" version of CUSP. In addition to timing P and S arrival signals, the VAX workstations are capable of measuring peak-to-peak amplitudes along with the associated period. This capability allowed the renewal of amplitude magnitude determinations from the network seismic stations. Amplitude data gathered from July 1992 to July 1997 became part of a test set to determine magnitude corrections for network stations. Results of newly determined magnitude corrections are detailed by Nakata and Okubo (1997)<sup>3</sup>.

The crustal model used is specified by velocities at four depth points. Velocity at any depth is given by linear interpolation between points and uses a homogeneous half-space, as listed below:

VELOCITY (km/sec)	DEPTH (km)
1.9	0.0
6.5	4.6
6.9	15.0
8.3	≥16.5

Two empirical sets of station delays or corrections were used in the HYPOINVERSE locations and are given in table 1. The delay models are separated by a circle of radius 34 km, centered at 19°22' N and 155°10' W. Delay model 1 is used for epicenters occurring within a circle of radius 31 km from the center. This region includes Kilauea and its south flank. A combination of the two delay models is used for epicenters that fall in a transition zone that is 6 km wide. Delay model 2 is applied to the rest of the island and offshore earthquakes. For a detailed description, refer to Klein<sup>2</sup>.

Magnitudes for events are computed using recorded amplitudes on selected network vertical, Modified Wood-Anderson (MW) horizontal, and/or moderate and low gain stations. Amplitude readings are corrected to an equivalent Wood-Anderson amplitude using the curves of figure 6 and CAL factors listed in table 1.

Duration magnitude is determined by the length of signal, in seconds, read from drum recordings of Type 1 seismographs. This length of time is measured from the P arrival to the point where the earthquake signal has decayed to nearly the background noise level. Drum-recorded duration magnitude is calculated with a relationship equivalent to the developcorder viewer output.

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<sup>2</sup> Klein, F.W., User's guide to HYPOINVERSE-2000, a Fortran Program to solve for earthquake locations and magnitudes: U.S. Geological Survey Open-File Report 02-171, 116 p.

<sup>3</sup> Nakata, J., and Okubo, P., 1997, Determination of station amplitude magnitude corrections for the Hawaiian Volcano Observatory telemetered seismograph network: Data from 1992-1997: U.S. Geological Survey Open-File Report 97-863, 73 p.

## SEISMIC CATALOG

The emphasis in both station coverage and detailed data analysis is on the highly active south half of the Island of Hawai'i. The set of well-recorded earthquakes located in the Hawai'i Island region is nearly complete above magnitude 2.0. Many smaller events are located in the densely instrumented Kilauea area. Substantial effort is made to locate earthquakes elsewhere within the Hawaiian Archipelago. Such coverage cannot be as complete as in south Hawai'i, but nearly all events above magnitude 4.0 are located with limited precision.

Data presented in the seismic catalog are in three parts: (1) Maps showing computer-located hypocenters are given in figures 11-24. The location maps are of different scales and provide hypocenters with magnitude thresholds set at 1.0, 2.0, 3.0, and 3.5, varying according to region. (2) The list of computer locations constitutes the bulk of this summary and is given in table 4. Each earthquake in the list is assigned a three-letter code based on its general location and depth. Figures 7-10 are maps of the regions used to assign the location codes. The latitude and longitude limits of rectangular regions are listed in table 3. When the listed coordinates overlap, precedence is given according to figures 7-10. (3) Table 5 re-lists the events in table 4 for which the preferred magnitude is 3.0 or larger. This list includes many of the earthquakes felt in Hawai'i.

**Table 3.** Names and coordinates of regions used for classifying earthquakes.

All earthquakes locate in one of the following groups, identified by a numerical class or three-letter code:

—Shallow:

- 1 SNC - Shallow north caldera (0-5 km)
- 2 SSC - Shallow south caldera (0-5 km)
- 3 SEC - Shallow east caldera (0-5 km)
- 4 SER - Shallow east rift (0-5 km)
- 5 SME - Shallow middle east rift (0-5 km)
- 6 KOA - Koa'e fault zone (0-5 km)
- 7 SSF - Shallow south flank (0-5 km)
- 8 SLE - Shallow lower east rift (0-5 km)

—Intermediate depth:

- 9 SF1 - Kilauea south flank (5-13 km) (west end)
- 10 SF2 - Kilauea south flank (5-13 km)
- 11 SF3 - Kilauea south flank (5-13 km)
- 12 SF4 - Kilauea south flank (5-13 km)
- 13 SF5 - Kilauea south flank (5-13 km) (east end)
- 14 LER - Lower east rift (5-99 km)
- 15 MLO - Mauna Loa (0-13 km)
- 16 LSW - Lower southwest rift zones of Kilauea and Mauna Loa (0-13 km)
- 17 GLN - Glenwood (0-13 km)
- 18 SWR - Southwest rift zone of Kilauea (0-13 km)
- 19 INT - Intermediate caldera (5-13 km)
- 20 KAO - Ka'oiki (0-13 km)

—Deep:

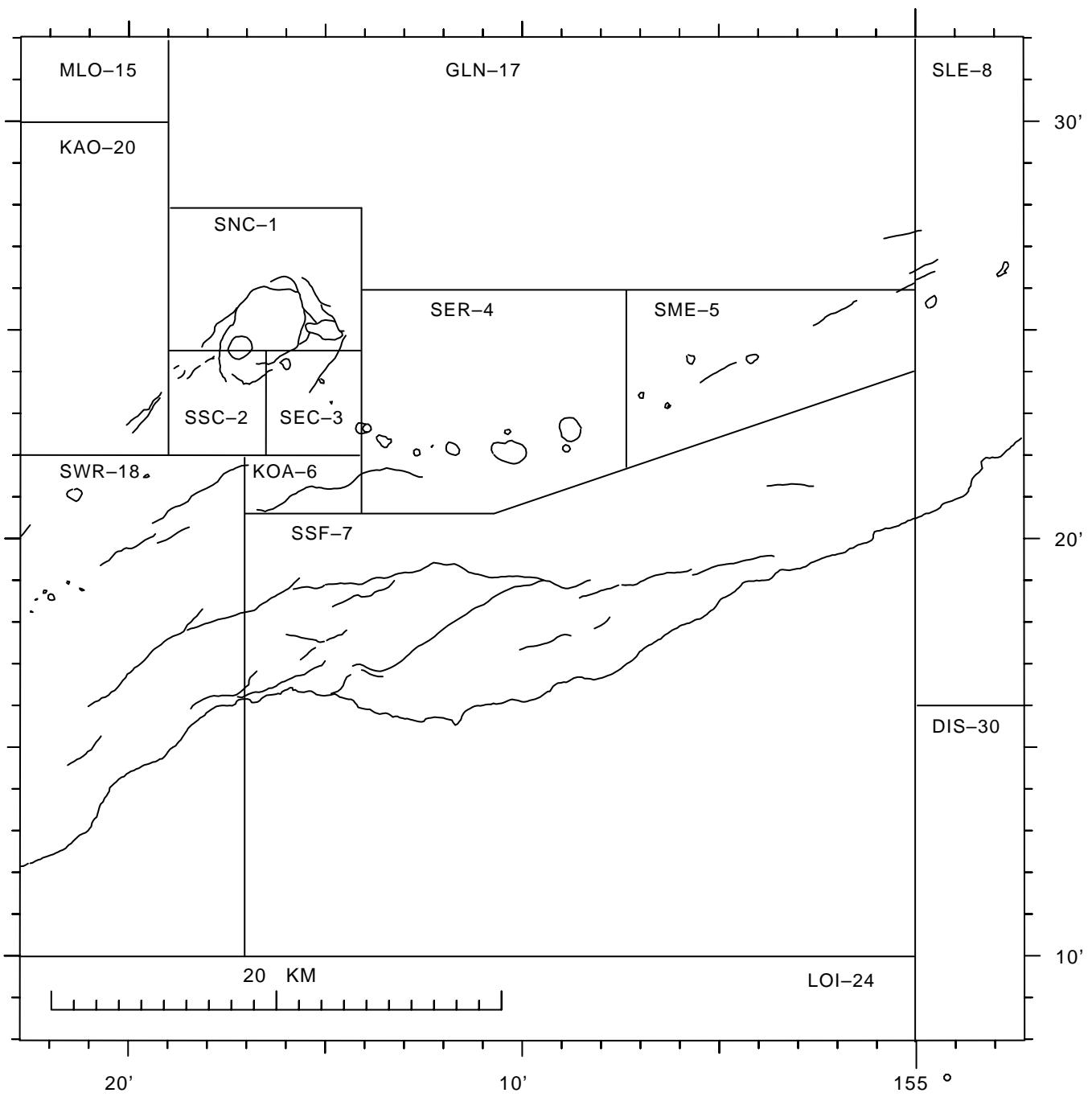
- 21 DEP - Deep Kilauea (>13 km) (below regions 1-13, 17-19)
- 22 DLS - Deep lower southwest rift zone of Kilauea and Mauna Loa (>13 km) (below region 16)
- 23 DML - Deep Mauna Loa (>13 km) (below regions 15, 20)

—Outer regions, all depths:

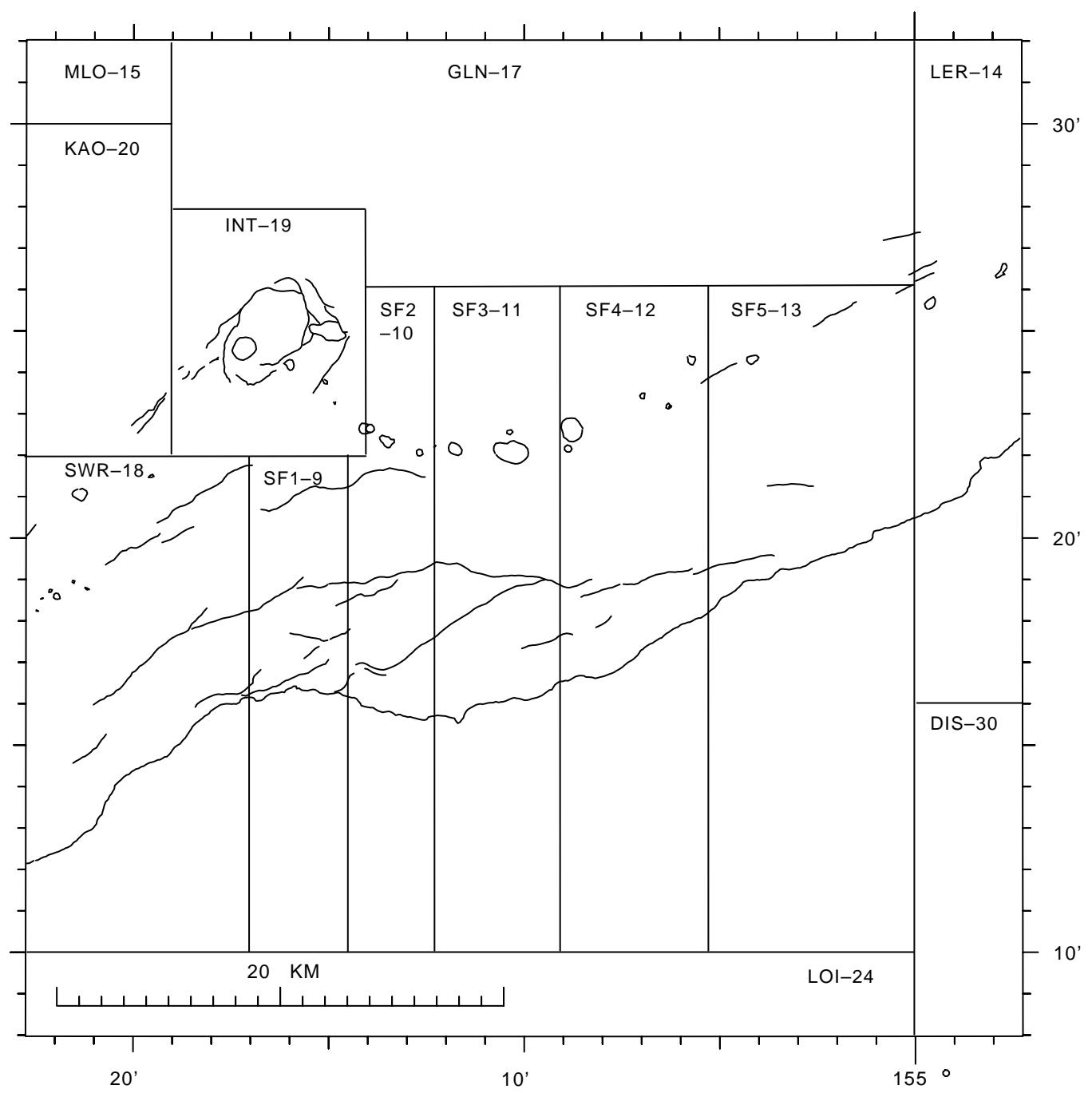
- 24 LOI - Lo'ihī
- 25 KON - South Kona
- 26 HUA - Hualalai
- 27 KOH - Kohala
- 28 KEA - Mauna Kea
- 29 HIL - Hilo
- 30 DIS - Distant, everywhere else

**Table 3** (continued). The latitude and longitude limits of the regions are given below. If the coordinates overlap, precedence is given according to maps in figures 7-10.

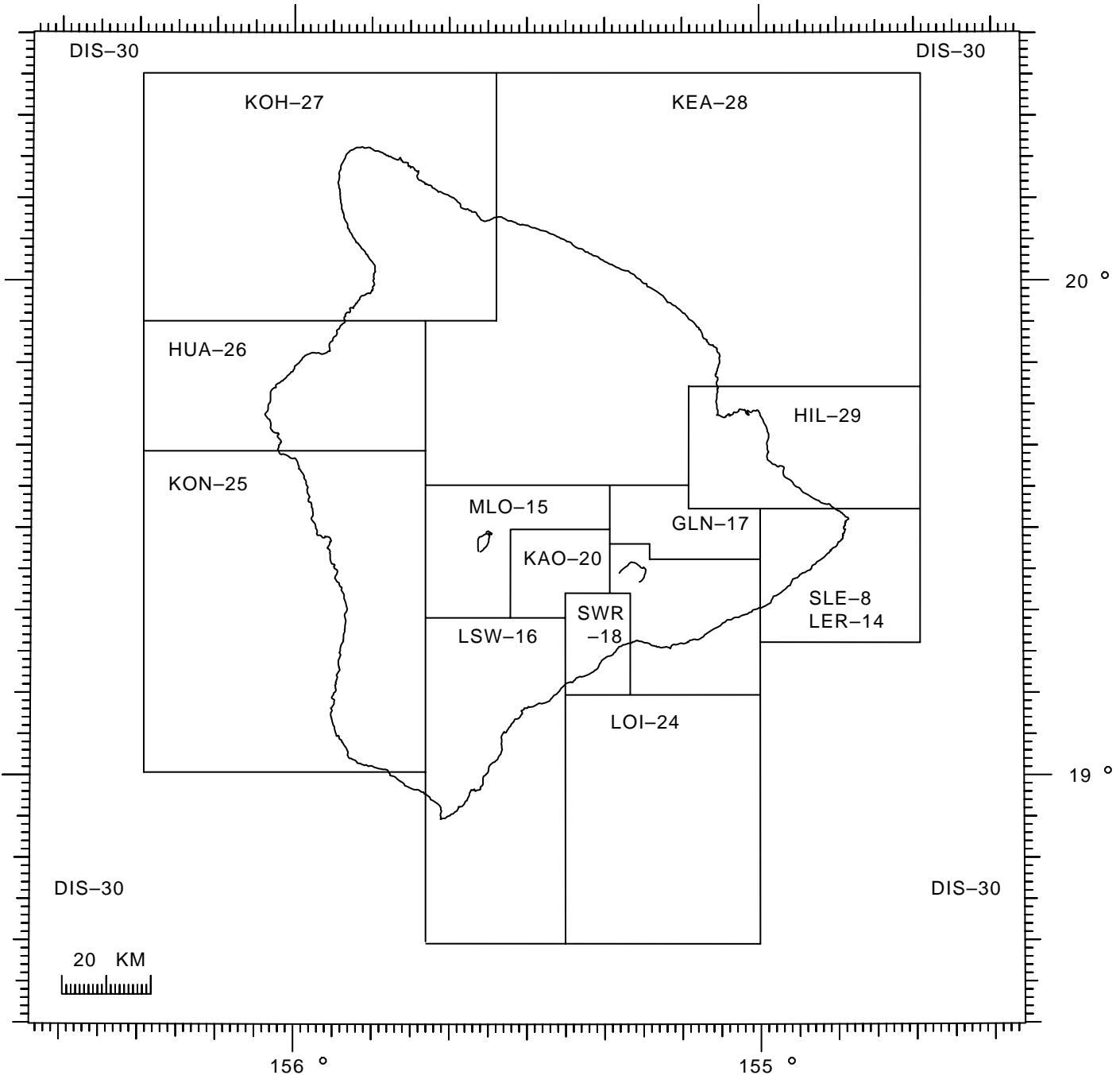
No.	Code	N. Lat.	S. Lat.	W. Lon.	E. Lon.
1	SNC	19 28.0	19 24.5	155 19.0	155 14.0
2	SSC	19 24.5	19 22.0	155 19.0	155 16.5
3	SEC	19 24.5	19 22.0	155 16.5	155 14.0
4	SER	19 26.0	19 20.5	155 14.0	155 07.2
5	SME	19 26.0	_____	155 07.2	155 00.0
6	KOA	19 22.0	19 20.5	155 17.0	155 14.0
7	SSF	_____	19 10.0	155 17.0	155 00.0
8	SLE	19 32.0	19 16.0	155 00.0	154 40.0
9	SF1	19 22.0	19 10.0	155 17.0	155 14.5
10	SF2	19 26.0	19 10.0	155 14.5	155 12.3
11	SF3	19 26.0	19 10.0	155 12.3	155 09.1
12	SF4	19 26.0	19 10.0	155 09.1	155 05.3
13	SF5	19 26.0	19 10.0	155 05.3	155 00.0
14	LER	19 32.0	19 16.0	155 00.0	154 40.0
15	MLO	19 35.0	19 19.0	155 35.0	155 19.0
16	LSW	19 19.0	18 40.0	155 43.0	155 25.0
17	GLN	19 35.0	19 26.0	155 19.0	155 00.0
18	SWR	19 22.0	19 10.0	155 25.0	155 17.0
19	INT	19 28.0	19 22.0	155 19.0	155 14.0
20	KAO	19 30.0	19 19.0	155 32.0	155 19.0
21	DEP	19 35.0	19 10.0	155 25.0	155 00.0
22	DLS	19 19.0	18 40.0	155 43.0	155 25.0
23	DML	19 35.0	19 19.0	155 35.0	155 19.0
24	LOI	19 10.0	18 40.0	155 25.0	155 00.0
25	KON	19 39.0	19 00.0	156 20.0	155 43.0
26	HUA	19 55.0	19 39.0	156 20.0	155 43.0
27	KOH	20 25.0	19 55.0	156 20.0	155 34.0
28	KEA	20 25.0	19 35.0	155 34.0	154 40.0
29	HIL	19 47.0	19 32.0	155 09.0	154 40.0



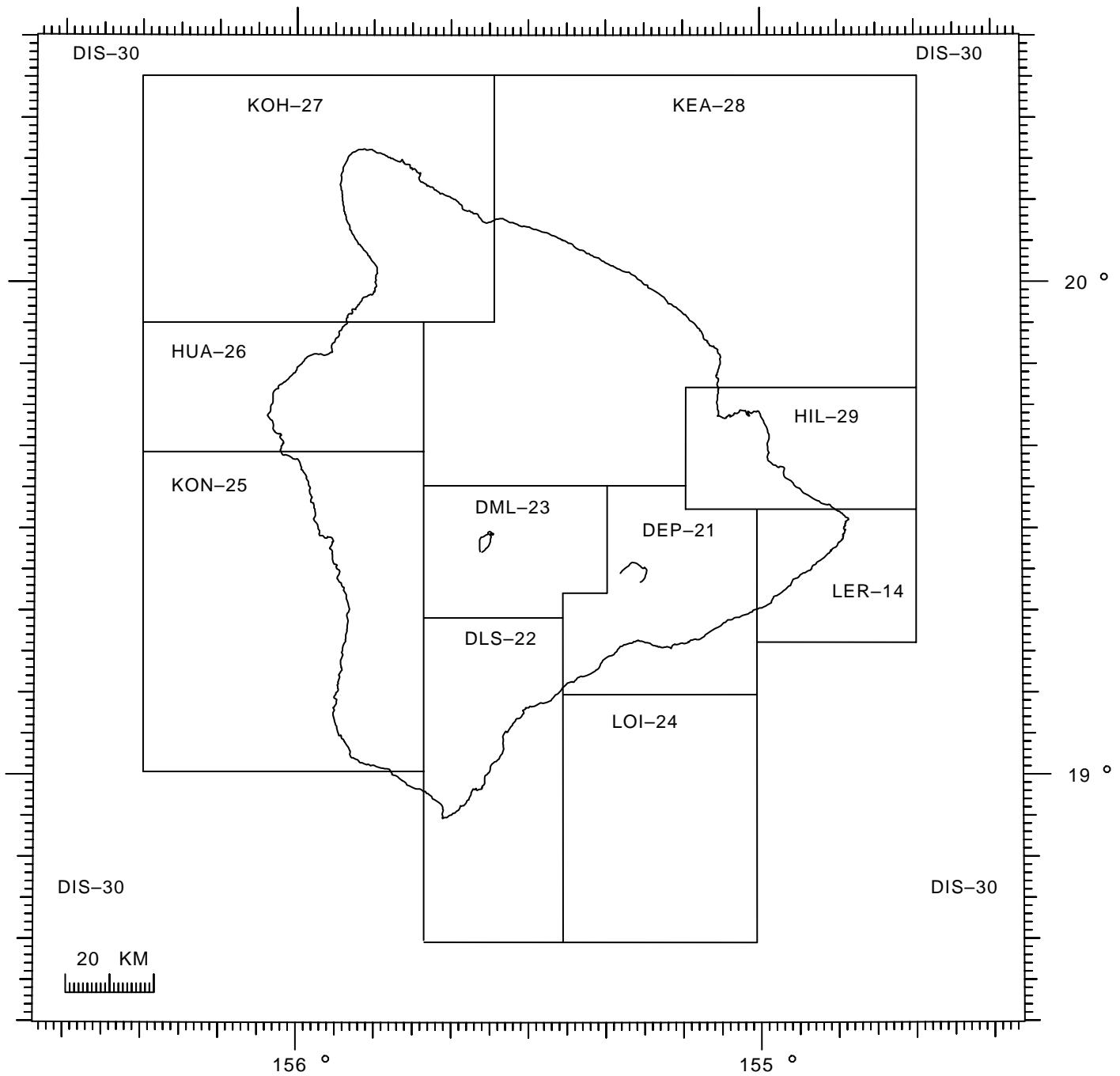
**Figure 7.** Earthquake classification, shallow (0-5 km deep), for Kilauea and the east flank of Mauna Loa.



**Figure 8.** Earthquake classification, intermediate (5.1-13 km deep), for Kilauea and the east flank of Mauna Loa.



**Figure 9.** Earthquake classification, crustal (0-13 km deep), for the Island of Hawai'i.



**Figure 10.** Earthquake classification, deep (greater than 13 km deep), for the Island of Hawai'i.

Figure 11. 2001 earthquake locations, Hawaiian Islands,  
0–60 km depth,  $M \geq 3.5$ .

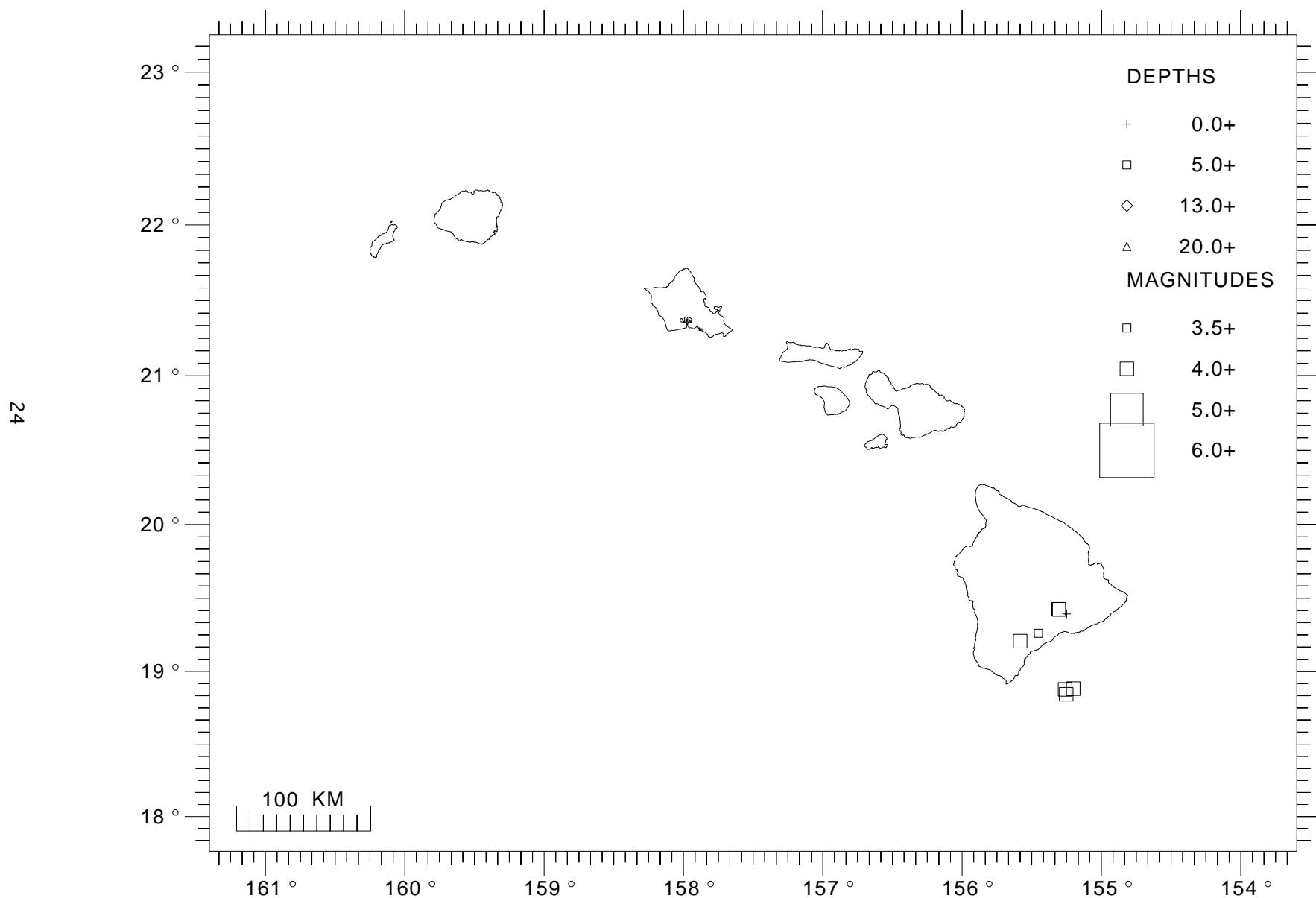


Figure 12. 2001 earthquake locations, Hawai'i Island,  
0–60 km depth,  $M \geq 3.0$ .

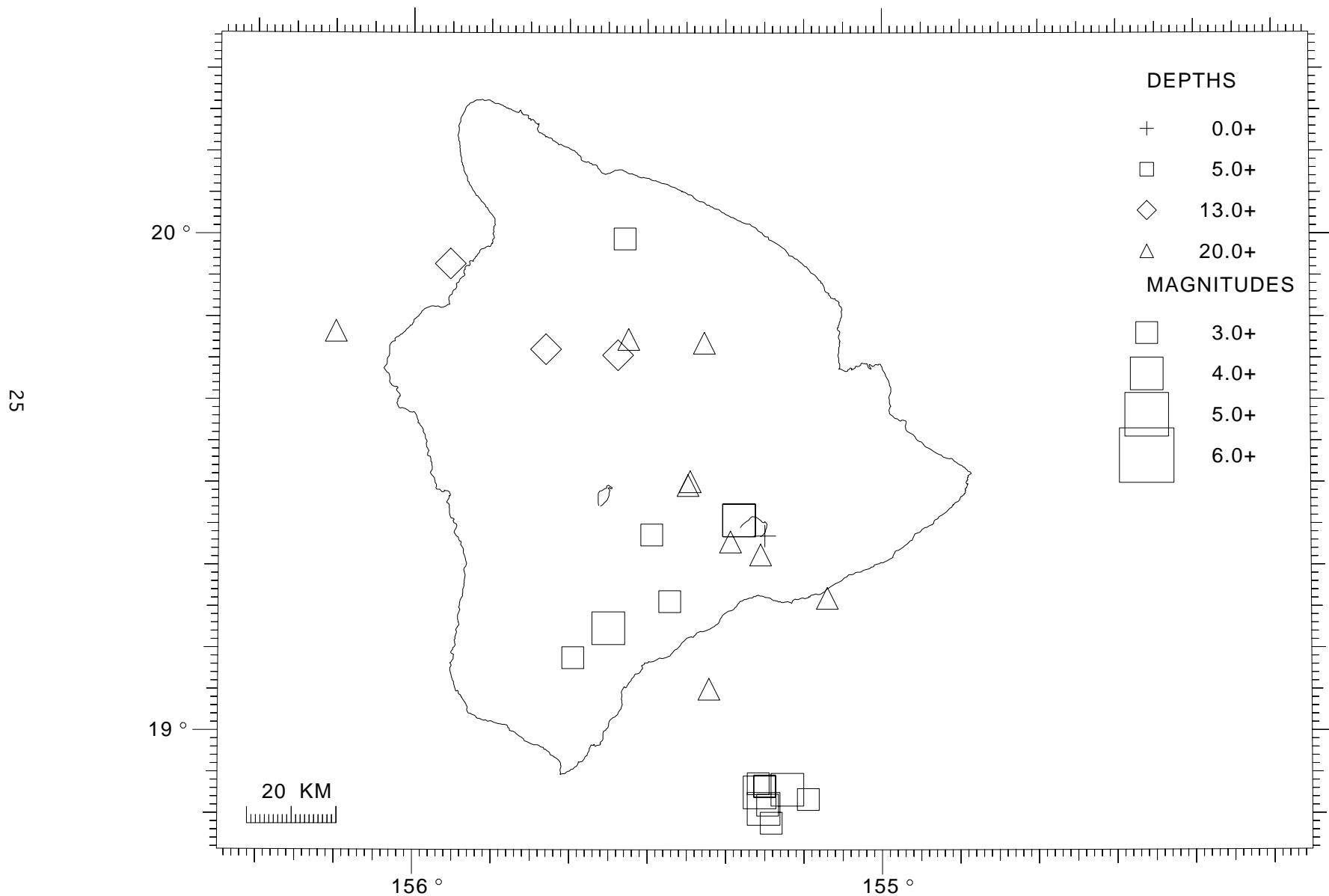


Figure 13. 2001 earthquake locations, Hawai'i Island,  
shallow (0–5.0 km depth),  $M \geq 2.0$ .

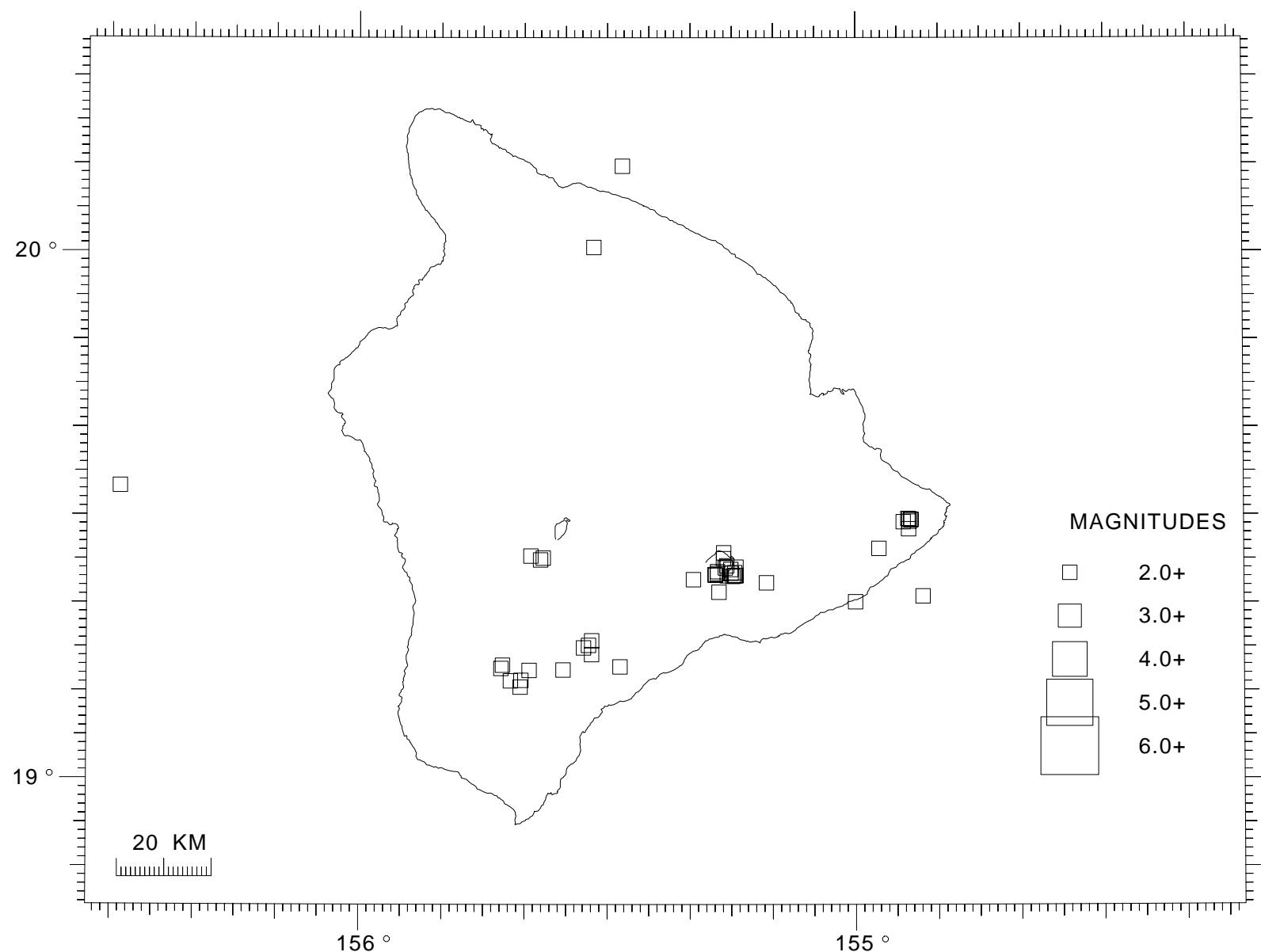


Figure 14. 2001 earthquake locations, Hawai'i Island,  
intermediate (5.1–13.0 km depth),  $M \geq 2.0$ .

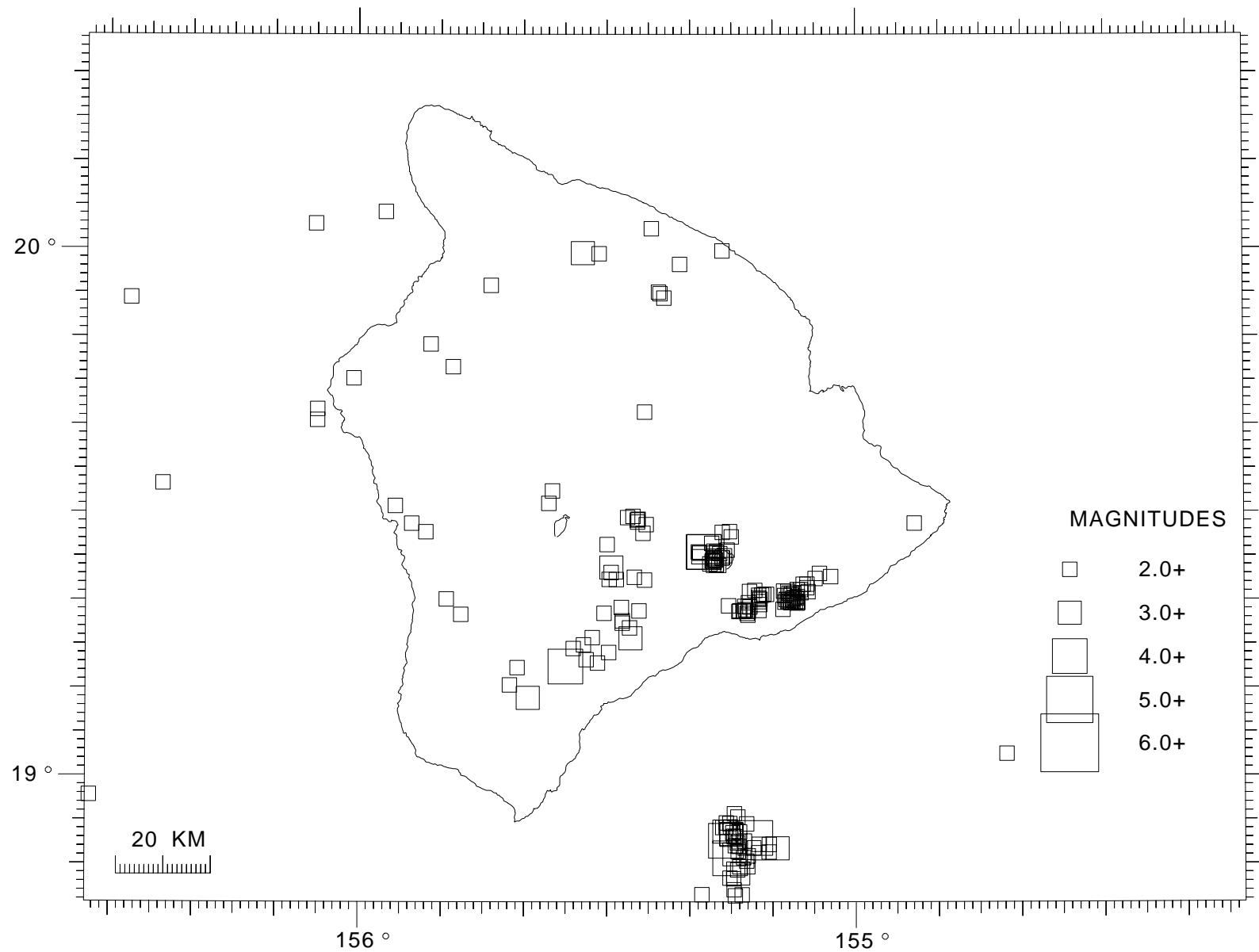


Figure 15. 2001 earthquake locations, Hawai'i Island,  
deep (13.1–60.0 km depth),  $M \geq 2.0$ .

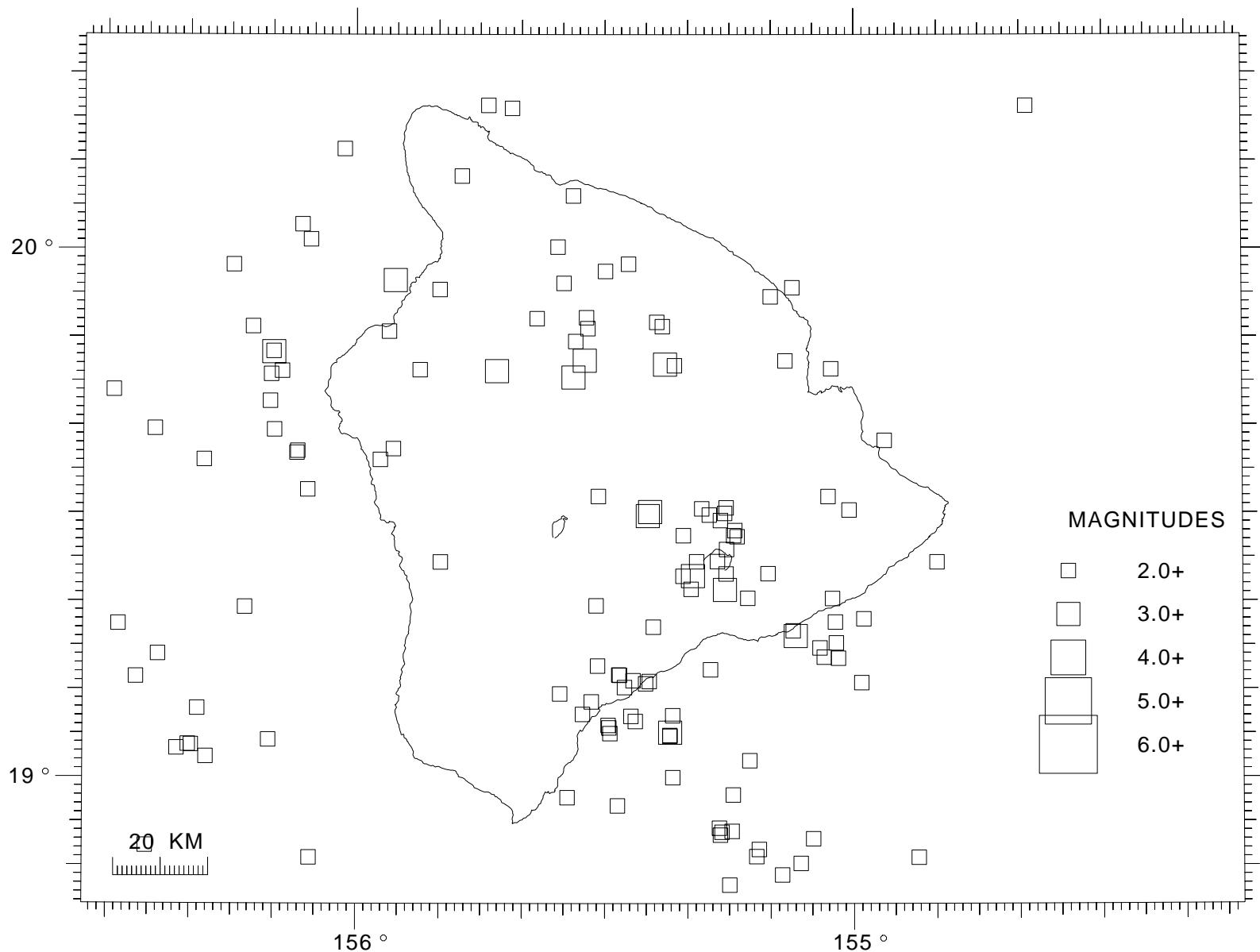


Figure 16. 2001 earthquake locations, Kilauea summit,  
shallow (0–5.0 km depth),  $M \geq 1.0$ .

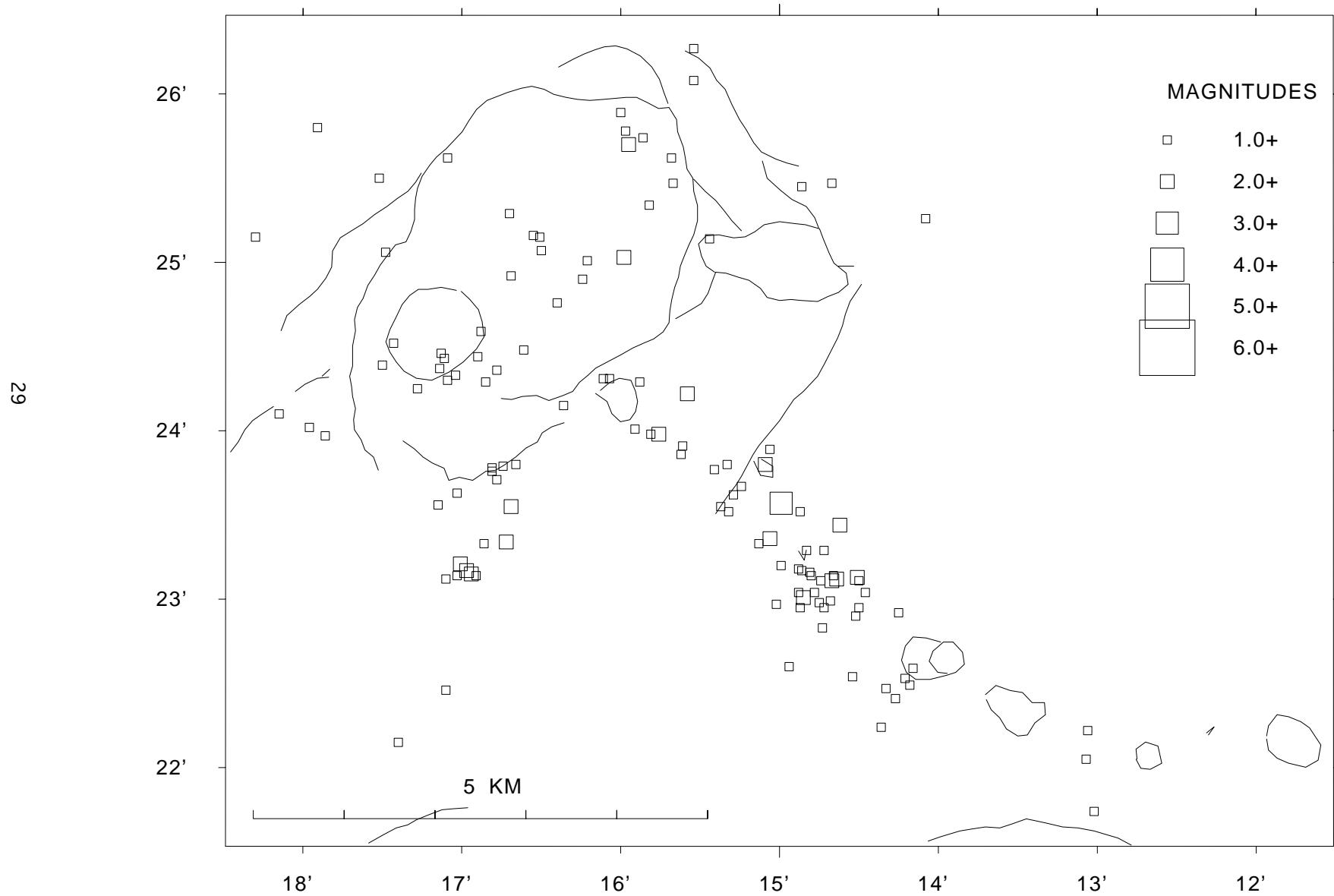


Figure 17. 2001 earthquake locations, Kilauea summit,  
intermediate (5.1–13.0 km depth), M>=1.0.

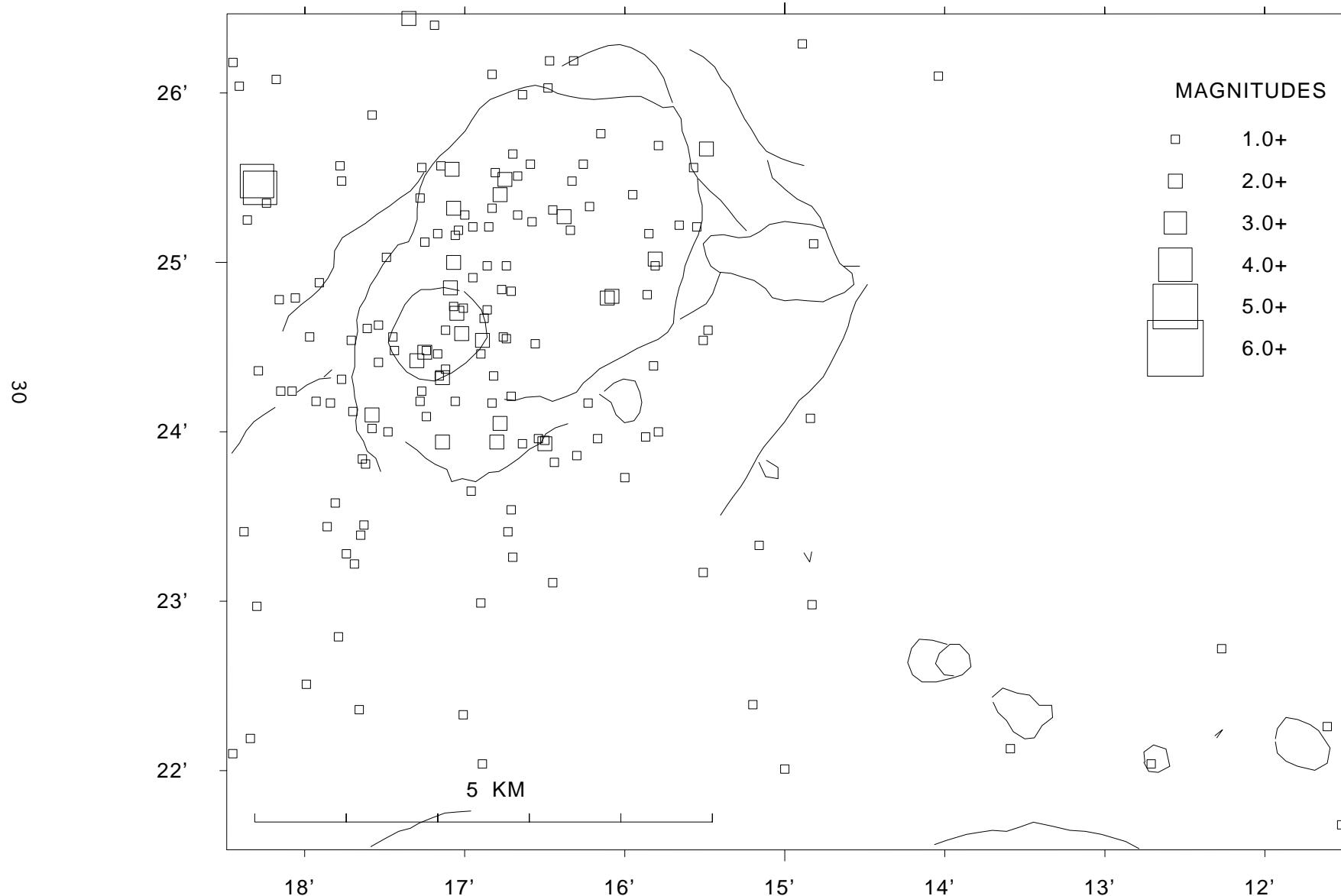


Figure 18. 2001 earthquake locations, Kilauea summit,  
deep (13.1–60.0 km depth),  $M \geq 1.0$ .

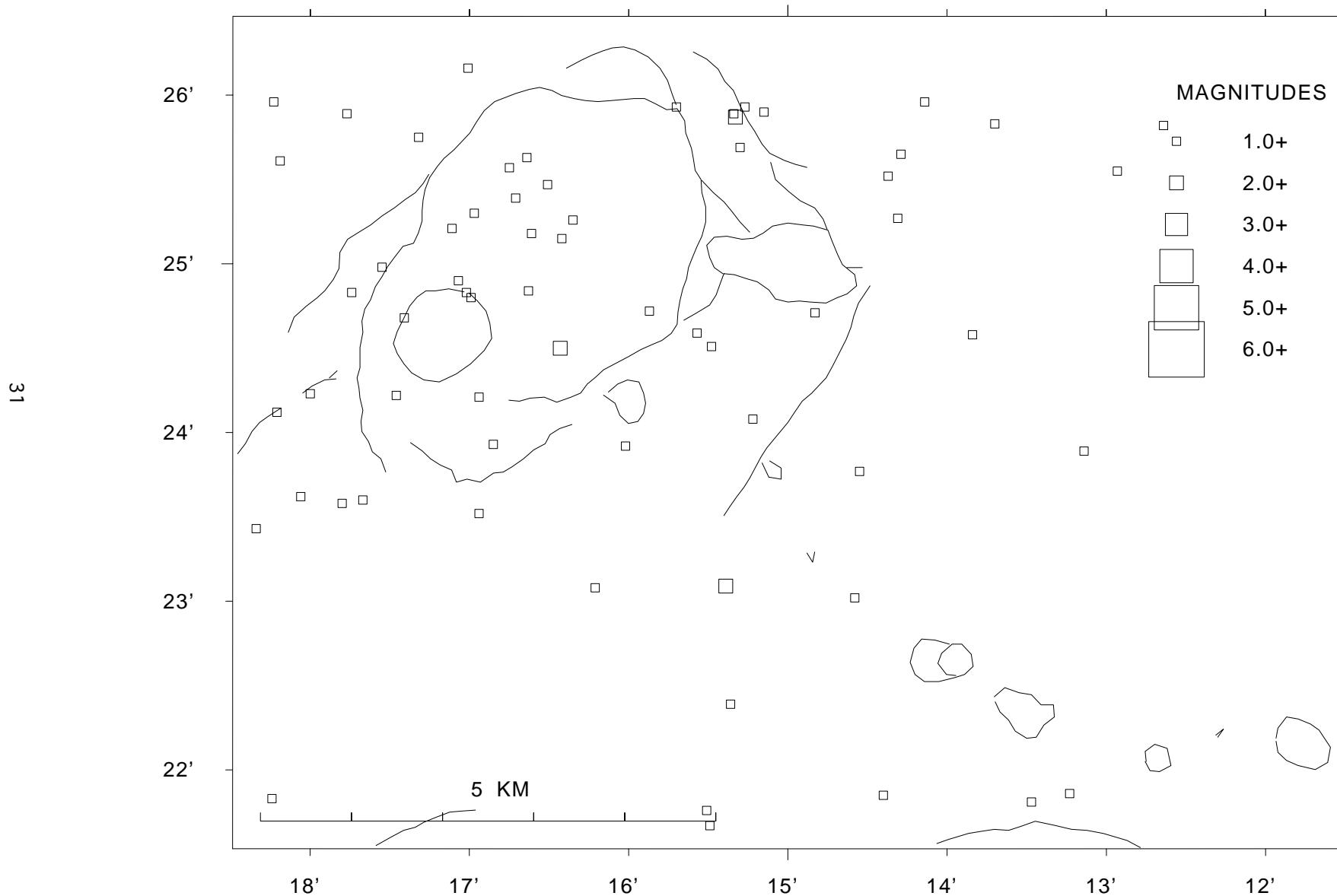


Figure 19. 2001 earthquake locations, Kilauea south flank,  
shallow (0–5.0 km depth), M>=2.0.

32

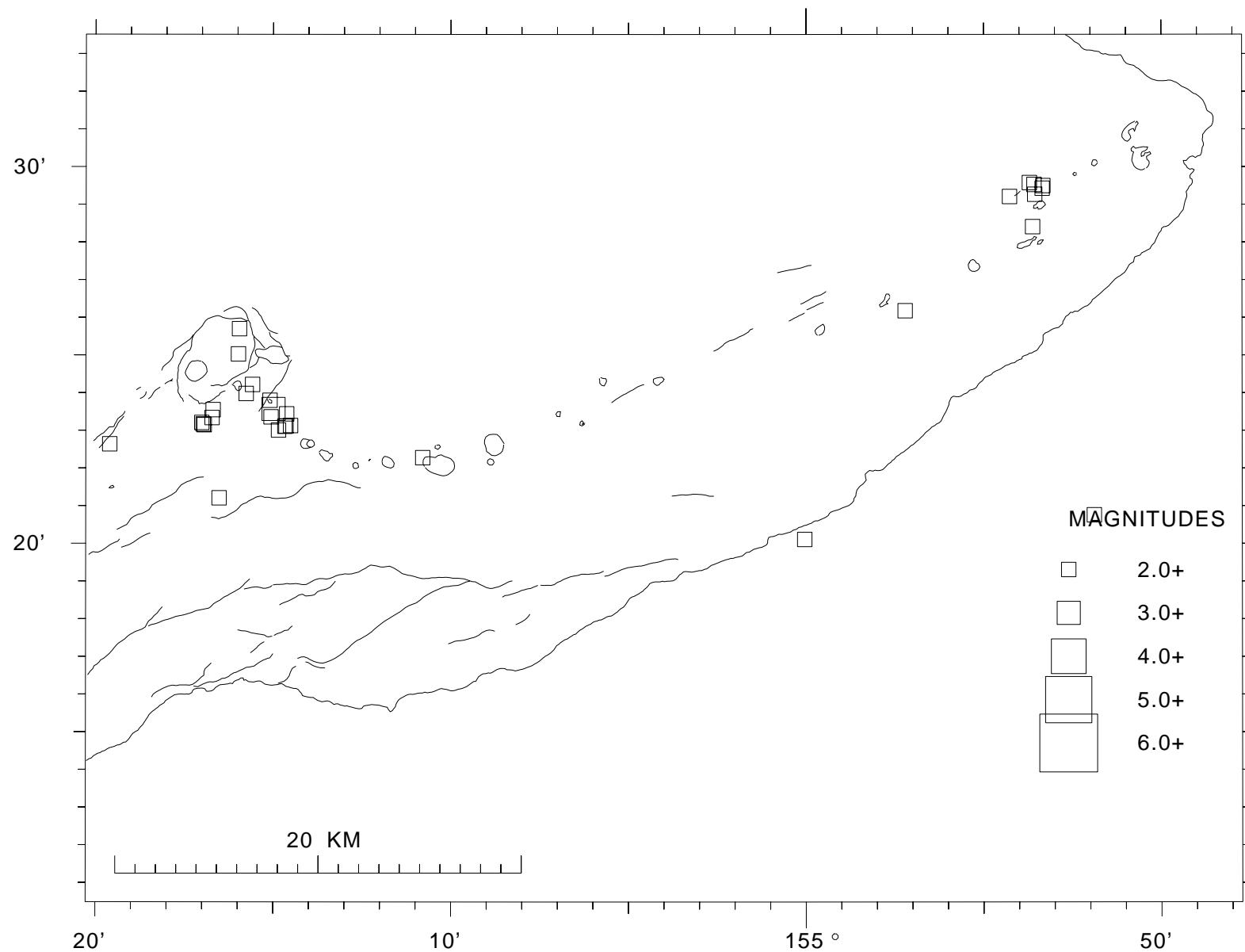


Figure 20. 2001 earthquake locations, Kilauea south flank,  
intermediate (5.1–13.0 km depth),  $M \geq 2.0$ .

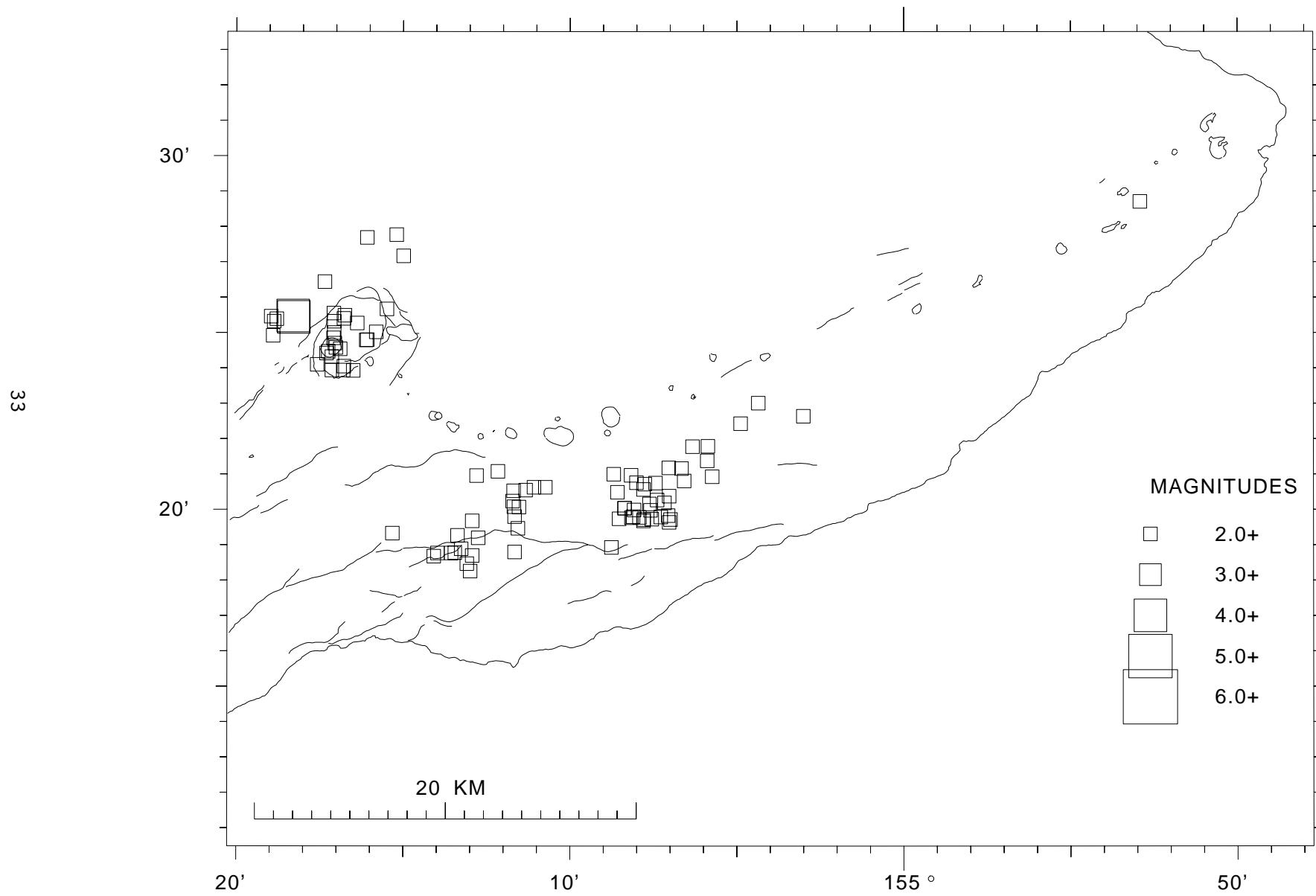


Figure 21. 2001 earthquake locations, Kilauea south flank,  
deep (13.1–60.0 km depth), M $\geq$ 2.0.

34

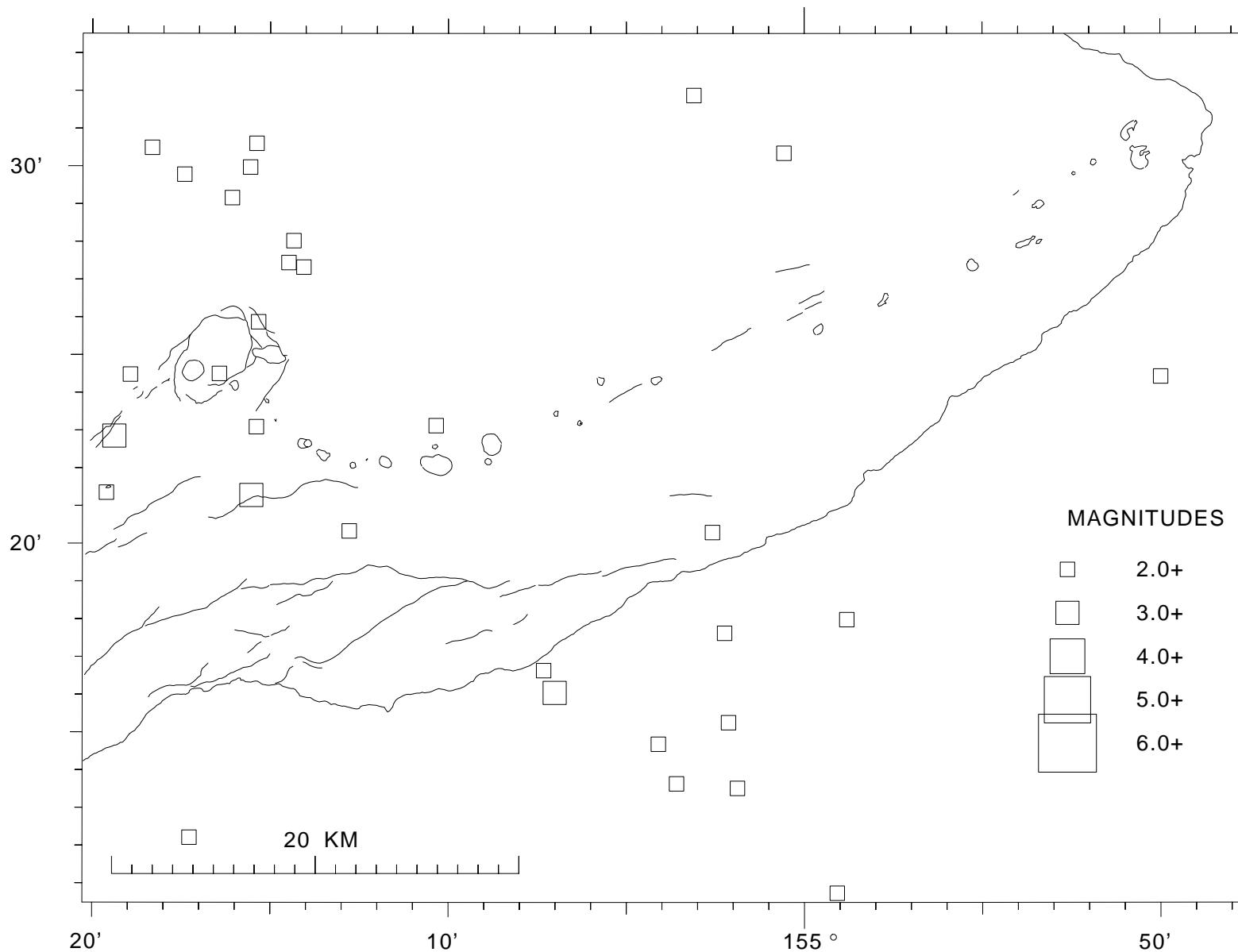


Figure 22. 2001 earthquake locations, Mauna Loa summit,  
shallow (0–5.0 km depth),  $M \geq 2.0$ .

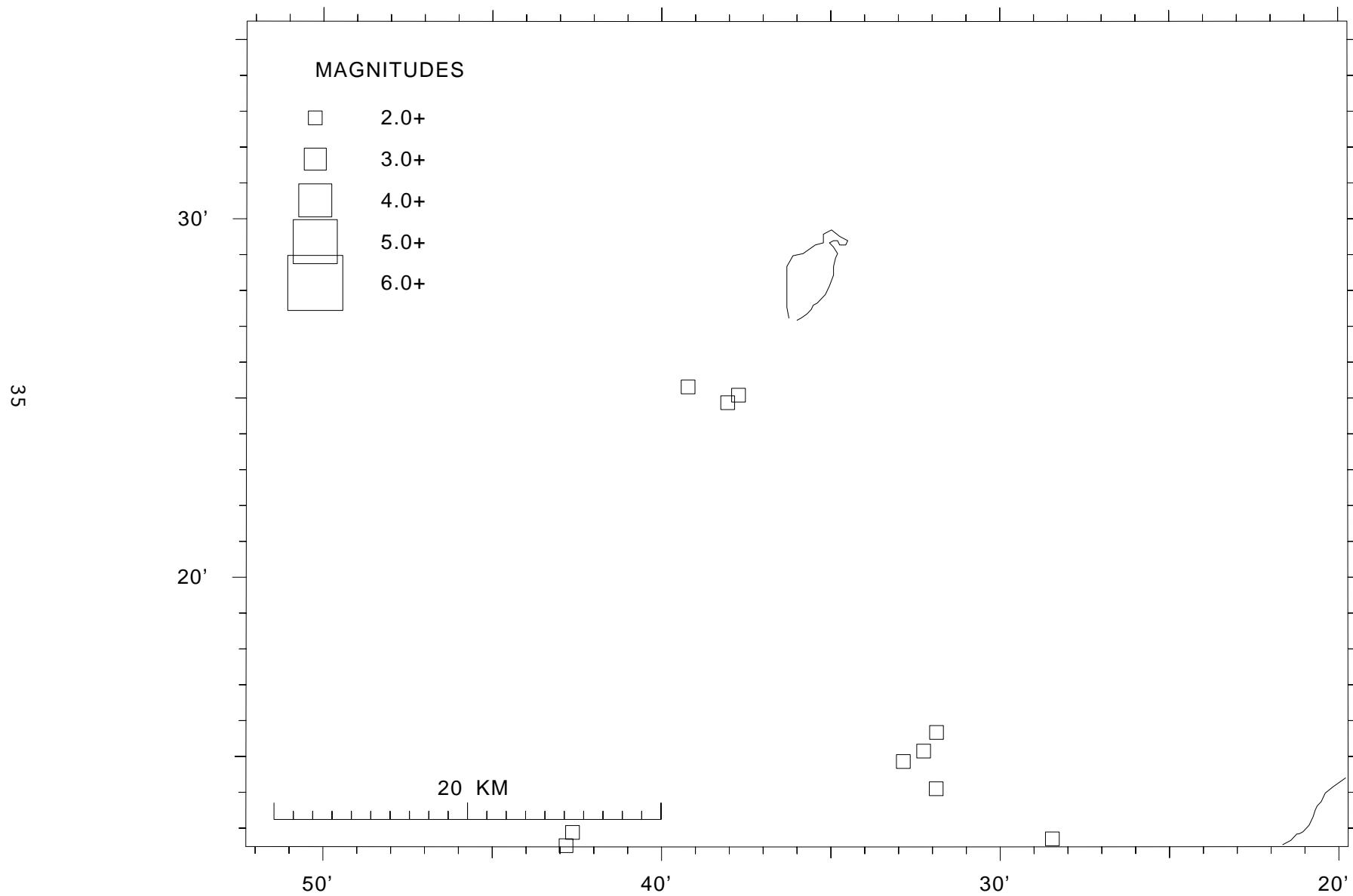


Figure 23. 2001 earthquake locations, Mauna Loa summit,  
intermediate (5.1–13.0 km depth), M>=2.0.

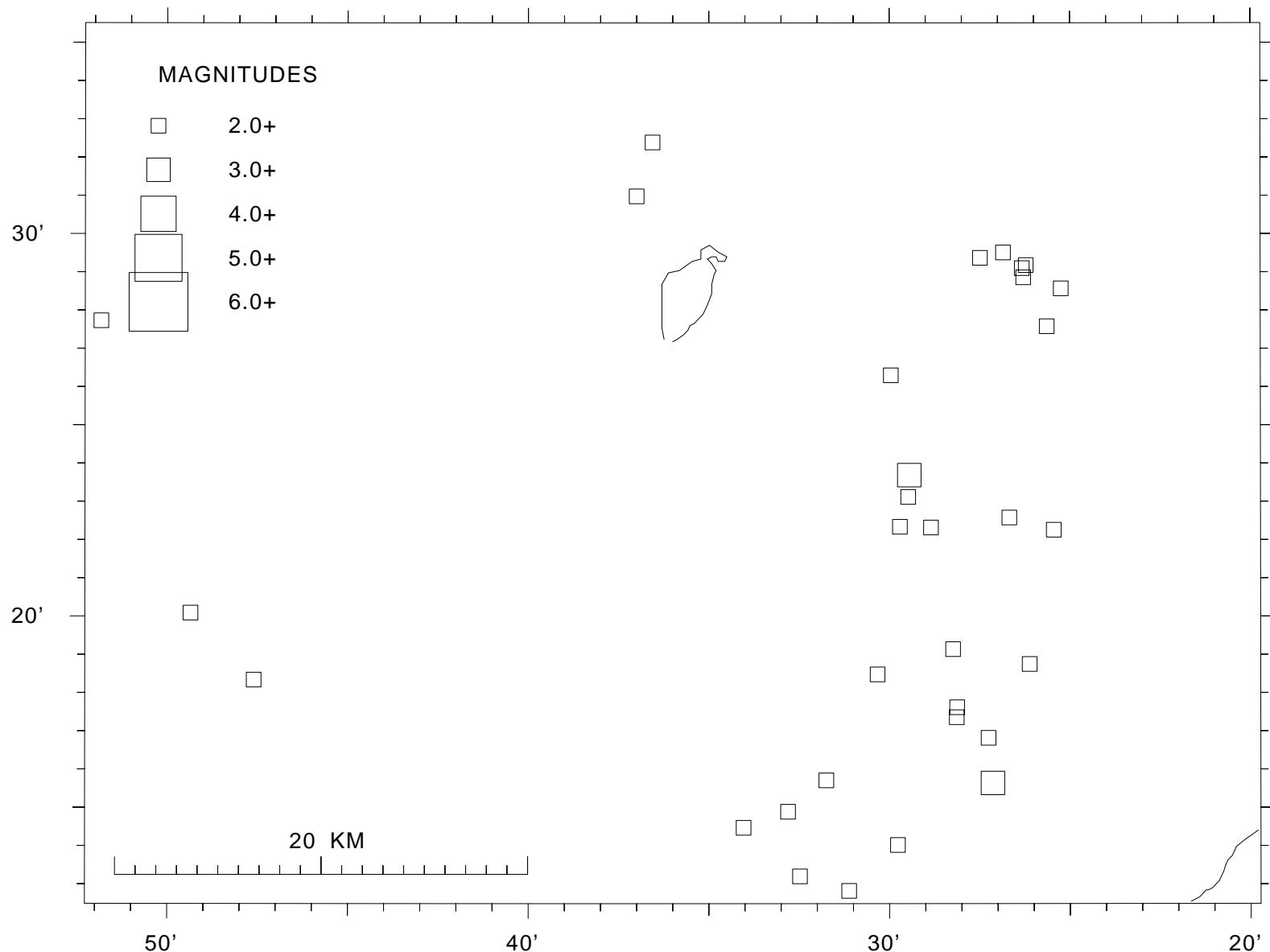
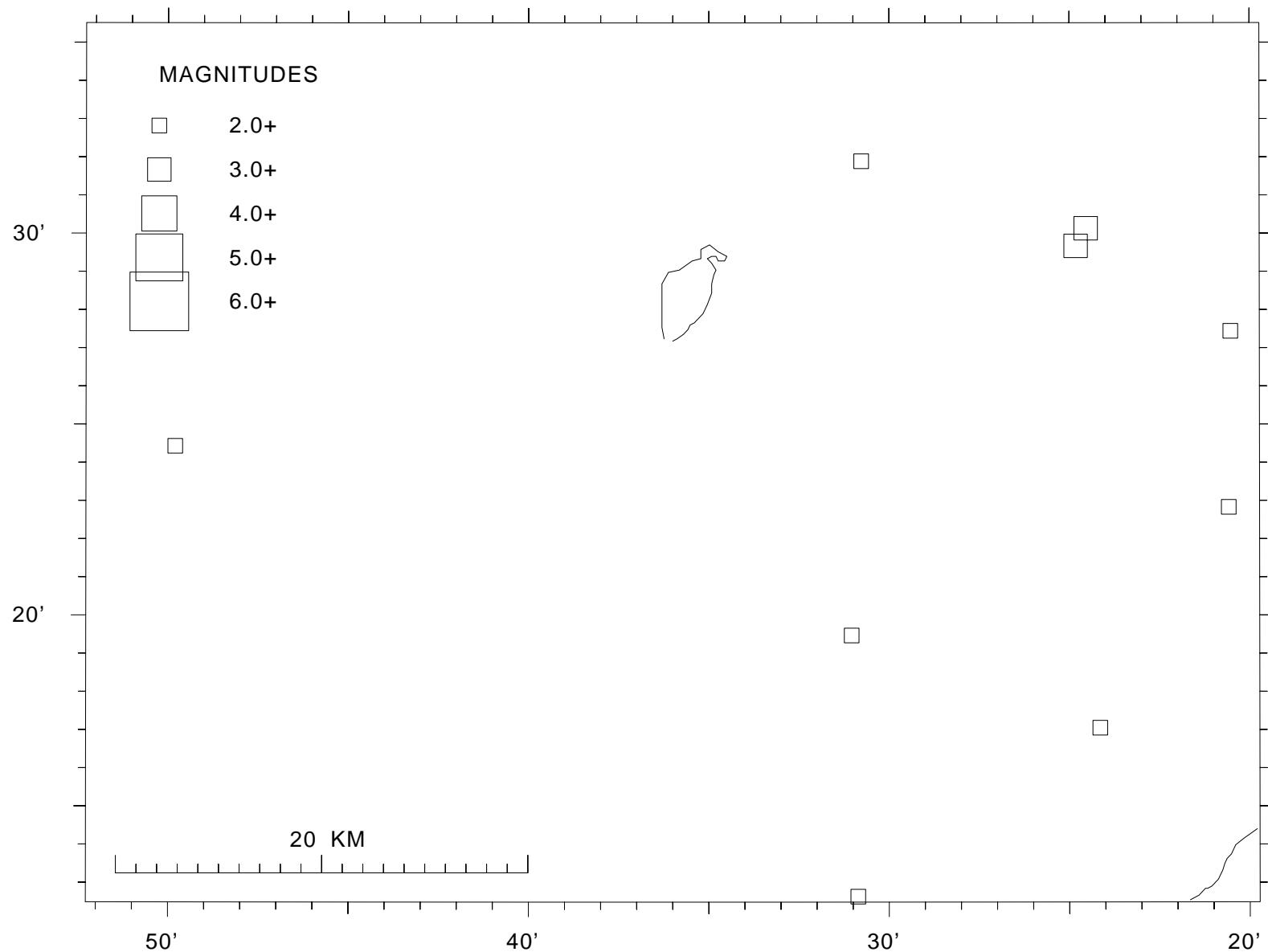


Figure 24. 2001 earthquake locations, Mauna Loa summit,  
deep (13.1–60.0 km depth),  $M \geq 2.0$ .



**Table 4** is a chronological list of selected events successfully located during 2001. For each event, the following data are presented:

ORIGIN TIME - in Hawaiian Standard Time: date, hour (HR), minute (MN), and second (SEC).

EPICENTER - in degrees and minutes of north latitude (LAT N) and west longitude (LON W) in Old Hawaiian Datum.

DEPTH - Depth of focus in kilometers.

NRD - Number of P & S readings with final weights > 0.1.

NS - Number of S readings with final weights > 0.1

RMS SEC - Root mean square travel time residuals, in seconds.

ERH km - Standard error of the epicenter, in kilometers.

ERZ km - Standard error of depth of focus, in kilometers.

LOC REMKS - Remarks, three-letter code for geographic location of events. See Figures 7-10 for location of mnemonic code. Additional one-letter codes have the following meanings:

F      felt

L      long-period character

T      associated with harmonic tremor

B      quarry or other blast

#      the location program had a convergence problem, which usually means that the depth may be unreliable.

-      the depth was held fixed.

PREF MAG - The preferred magnitude chosen from the available magnitudes.

Preference set as: X-amplitude magnitude, if none

D-Develocorder duration magnitude, if none

U-external magnitude, usually calculated from drum records.

NRD - The total weight of amplitude magnitude readings from contributing stations.

AZ GAP - Largest azimuthal gap in degrees between azimuthally adjacent stations.

MIN DS - Distance to the nearest station, in kilometers.

**Table 5** is a list of events of magnitude 3.0 or greater, selected from Table 4.

**Table 4.**

ORIGIN TIME (HST)																			
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMK	MAG	RD	GAP	DS

2001	JAN	1	0044	36.11	19	12.63	155	25.72	39.91	30	3	.10	.8	1.8	DLS	1.7X	151	4
2001	JAN	1	0336	27.10	19	12.86	155	32.44	5.79	13	.13	.6	2.3	LSW	1.5X	130	6	
2001	JAN	1	0358	16.73	19	12.48	155	25.51	40.13	28	4	.10	.8	1.7	DLS	1.6X	153	4
2001	JAN	1	0519	8.54	19	28.75	154	53.43	0.12	11	2	.09	1.0	.6	SLE	.6X	169	4
2001	JAN	1	0519	12.45	19	29.58	154	53.71	0.03	10	1	.14	.6	1.0	SLE	# 2.0U	166	5

2001	JAN	1	0634	35.85	19	25.87	155	18.72	6.66	28	8	.08	.5	.7	INT	1.8X	88	2
2001	JAN	1	0913	30.29	19	13.62	155	26.98	12.60	15	1	.09	.7	1.1	LSW	1.3X	145	5
2001	JAN	1	1144	38.33	19	14.52	155	19.06	29.71	35	7	.11	.7	1.4	DEP	1.7X	158	6
2001	JAN	1	1242	16.04	19	12.83	155	29.24	5.48	19	2	.16	.7	1.9	LSW	1.2X	140	4
2001	JAN	2	0104	40.20	19	17.60	155	28.04	8.54	22	1	.12	.4	1.3	LSW	1.4X	120	6

2001	JAN	2	0302	2.20	19	19.60	155	7.44	6.51	22	3	.09	.6	1.2	SF4	1.5X	160	4
2001	JAN	2	0624	41.58	19	20.13	155	8.97	6.61	17	2	.06	.5	1.2	SF4	1.3X	139	4
2001	JAN	2	0654	48.77	19	45.40	155	33.79	14.71	42	7	.12	.4	.4	KEAF	3.2X	112	11
2001	JAN	2	0710	57.55	19	45.40	155	34.37	14.02	23	3	.12	1.0	.6	KEA	1.7X	182	12
2001	JAN	2	0756	5.79	19	16.93	155	27.15	7.61	30	3	.13	.4	.9	LSW	1.9X	84	6

2001	JAN	2	1929	7.40	19	21.11	155	5.10	5.22	15	.08	.9	2.2	SF5	1.3X	200	6	
2001	JAN	2	1949	38.93	19	21.81	155	4.69	6.81	16	2	.10	.9	.7	SF5	1.3X	203	5
2001	JAN	2	2022	24.58	19	11.08	155	30.99	12.54	18	2	.08	.6	.8	LSW	1.1X	142	8
2001	JAN	2	2140	41.09	19	29.89	155	17.05	23.14	29	6	.09	.7	.7	DEP	1.6X	144	4
2001	JAN	2	2147	38.79	19	59.43	155	18.05	4.81	13	3	.09	1.5	1.6	KEA	1.5X	310	28

2001	JAN	2	2233	41.46	19	19.38	155	9.71	7.63	23	2	.11	.6	.8	SF3	1.3X	97	5
2001	JAN	2	2247	4.55	19	20.13	155	11.83	7.23	22	2	.12	.5	.9	SF3	1.4X	80	5
2001	JAN	2	2337	25.30	19	26.93	155	53.50	15.74	14	1	.12	1.4	1.3	KON	.8X	155	5
2001	JAN	3	0132	16.79	19	20.15	155	8.72	8.28	18	2	.10	.7	.8	SF4	1.4X	148	4
2001	JAN	3	0135	59.86	19	20.24	155	11.31	8.58	20	1	.11	.5	.7	SF3	1.2X	81	4

2001	JAN	3	0447	51.17	19	21.74	155	6.96	8.05	18	2	.10	.6	.7	SF4	1.2X	147	3
2001	JAN	3	0712	21.91	19	13.93	155	28.63	7.97	10	1	.08	.7	.9	LSW	1.0X	178	3
2001	JAN	3	1452	33.81	19	20.54	155	19.12	5.03	38	7	.12	.3	1.2	SWR	2.0X	63	3
2001	JAN	3	1607	24.76	19	19.62	155	7.72	7.98	20	2	.08	.7	.9	SF4	1.3X	150	4
2001	JAN	3	2230	37.79	19	19.95	155	7.32	7.40	21	2	.07	.6	.7	SF4	1.3X	160	5

2001	JAN	3	2310	56.08	19	29.64	155	57.26	18.78	14	1	.14	4.5	3.7	KON	1.3X	275	4
2001	JAN	4	0033	20.17	19	23.79	154	59.93	8.37	18	.13	2.9	.7	LER	1.5X	278	7	
2001	JAN	4	0117	38.82	19	20.88	155	12.98	7.66	29	3	.12	.4	.6	SF2	1.5X	67	3
2001	JAN	4	0128	41.11	19	10.68	155	16.64	52.15	21	1	.12	1.2	3.2	DEP	1.5X	192	13
2001	JAN	4	0148	40.83	19	13.52	155	28.01	8.94	14	1	.11	.6	1.0	LSW	1.1X	140	5

2001	JAN	4	0450	47.74	19	20.05	155	7.76	7.63	26	2	.08	.5	.6	SF4	1.8X	145	5
2001	JAN	4	0524	27.92	19	47.66	156	1.95	32.78	25	2	.11	1.1	2.1	HUA	1.8X	178	24
2001	JAN	4	0630	20.19	19	15.51	155	27.18	27.18	14	.13	.9	3.0	DLS	1.2X	106	6	
2001	JAN	4	0924	24.85	19	18.59	155	15.01	5.65	18	1	.07	.5	1.4	SF1	.9X	108	4
2001	JAN	4	1654	57.28	19	18.70	155	14.81	4.96	16	.07	.6	1.9	SSF	1.0X	143	5	

2001	JAN	4	1722	30.67	19	59.25	156	5.09	9.44	19	2	.15	.8	1.4	KOH	1.8X	176	36
2001	JAN	4	1749	17.33	19	11.99	155	29.19	6.76	16	.13	.7	1.8	LSW	1.3X	143	6	
2001	JAN	4	1838	30.71	19	50.58	156	5.10	38.26	22	3	.13	2.5	2.1	HUA	1.8X	312	31
2001	JAN	4	2155	9.23	19	30.76	155	45.94	9.95	18	4	.11	.6	1.9	KON	1.1X	78	16
2001	JAN	4	2223	2.96	19	22.12	155	5.41	6.46	24	2	.14	.7	.9	SF4	1.5X	178	5

ORIGIN TIME (HST)																			
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMK	MAG	RD	GAP	DS

2001	JAN	4	2257	51.71	19	20.32	155	8.25	7.52	23	2	.11	.6	.7	SF4	1.5X	130	4
2001	JAN	4	2258	6.32	19	19.74	155	8.53	6.82	14	4	.07	.5	1.1	SF4	2.0X	125	5
2001	JAN	5	0246	47.46	19	11.13	155	28.10	35.87	22	3	.10	.9	2.0	DLS	1.5X	152	8
2001	JAN	5	0422	35.58	20	7.42	156	7.79	40.01	14	5	.13	1.3	2.3	KOH	1.6X	175	37
2001	JAN	5	0731	21.34	19	20.48	155	24.84	0.06	15	2	.07	.4	.5	SWR	# .7X	70	11

2001	JAN	5	0926	38.44	19	25.08	155	19.45	5.99	15	3	.08	.7	1.3	KAO	1.1X	139	3
2001	JAN	5	1817	11.94	19	12.15	155	24.26	37.36	17	1	.10	1.5	2.5	DEP	1.3X	217	4
2001	JAN	5	1825	41.72	19	19.56	155	8.08	8.00	22	2	.09	.6	.8	SF4	1.6X	138	4
2001	JAN	5	1900	18.57	19	28.36	155	24.47	33.08	22	5	.10	.8	1.4	DML	1.5X	64	3
2001	JAN	5	1914	48.25	19	19.85	155	8.40	6.67	18	2	.08	.6	1.2	SF4	1.3X	128	5

2001	JAN	5	2309	27.02	19	57.96	155	35.46	37.62	11	2	.10	2.8	1.6	KOH	1.4X	318	25
2001	JAN	5	2338	26.26	19	25.32	155	39.22	2.22	19	2	.17	.5	.7	MLO	2.1X	125	3
2001	JAN	6	0227	13.40	19	18.24	155	1.52	36.24	23	2	.07	1.8	1.6	DEP	1.3X	264	11
2001	JAN	6	1045	40.89	19	24.99	155	21.23	1.40	11	3	.08	.5	.8	KAO	1.2X	176	5
2001	JAN	6	1045	51.49	19	26.56	155	18.72	8.85	8	2	.07	.9	.9	INT	1.4X	182	3

2001	JAN	6	1253	2.58	19	19.90	155	10.96	7.48	21	2	.08	.5	.9	SF3	.9X	89	4
2001	JAN	6	1304	3.98	19	12.82	155	31.12	11.37	38	7	.13	.5	.7	LSW	2.3X	134	5
2001	JAN	6	1705	42.73	19	22.32	155	28.85	11.45	28	3	.11	.4	.9	KAO	2.0X	42	9
2001	JAN	6	1735	31.23	20	2.79	156	6.50	38.79	37	6	.13	.9	1.6	KOH	2.3X	176	27
2001	JAN	6	1919	14.81	19	12.22	155	30.94	9.28	18	1	.10	.6	1.2	LSW	1.0X	137	5

2001	JAN	6	2102	17.58	20	0.00	155	28.96	20.77	15	1	.10	3.1	3.9	KEA	1.3X	298	24
2001	JAN	6	2227	55.15	19	26.30	155	29.96	10.48	40	8	.09	.3	.7	KAO	2.6X	42	9
2001	JAN	7	0123	23.16	19	30.80	155	19.97	12.28	15	3	.09						

ORIGIN TIME (HST)	LAT	N	LON	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN				
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS

2001 JAN 10 0734 12.23 19 25.78 155 27.86 10.84 19 3 .10 .5 1.5 KAO 1.2X 68 9  
 2001 JAN 10 0815 1.24 19 25.06 155 17.48 3.20 14 5 .12 .8 .3 SNCL 1.4X 132 1  
 2001 JAN 10 1506 47.02 19 22.01 155 28.55 11.81 21 2 .12 .5 1.1 KAO 1.2X 63 9  
 2001 JAN 10 2148 6.31 19 15.48 155 28.06 8.42 22 1 .14 .5 .9 LSW 1.4X 144 4  
 2001 JAN 10 2331 28.41 19 15.03 155 2.55 41.79 22 1 .12 1.8 2.0 DEP 1.7X 244 10

2001 JAN 11 0008 30.27 19 12.91 155 33.27 8.82 25 2 .14 .7 1.1 LSW 1.5X 173 7  
 2001 JAN 11 0018 48.63 19 13.15 155 33.07 8.23 20 .11 .6 1.0 LSW 1.1X 123 6  
 2001 JAN 11 0616 45.69 19 28.11 155 26.81 8.10 31 4 .12 .4 1.1 KAO 1.8X 46 6  
 2001 JAN 11 0725 44.91 19 24.57 155 29.44 14.29 14 1 .14 .8 1.8 DML 1.3X 68 6  
 2001 JAN 11 1743 29.37 19 24.62 154 40.54 36.64 25 1 .14 4.6 2.8 LER 2.0X 303 19

2001 JAN 11 1903 11.73 19 21.03 155 12.75 8.29 25 2 .13 .6 .6 SF2 1.5X 114 3  
 2001 JAN 12 0514 46.49 19 28.78 155 27.05 11.95 20 4 .12 .6 1.5 KAO 1.2X 102 6  
 2001 JAN 12 0515 18.58 19 28.49 155 27.06 12.20 29 5 .11 .4 .8 KAO 1.9X 61 7  
 2001 JAN 12 0958 30.69 19 12.73 155 26.00 38.84 28 5 .09 .7 1.3 DLS 1.7X 150 5  
 2001 JAN 12 1331 30.81 19 20.25 155 7.64 6.59 26 5 .08 .4 .8 SF4 1.2X 126 5

2001 JAN 12 1428 57.29 19 27.29 155 37.22 10.98 16 3 .08 1.1 .9 MLO 1.3X 177 2  
 2001 JAN 12 1943 24.62 19 24.10 155 18.15 2.34 14 6 .08 .6 .6 SSCL 1.4X 198 3  
 2001 JAN 12 2035 40.09 19 26.52 155 18.54 6.48 30 6 .10 .5 .6 INT 1.3X 58 3  
 2001 JAN 12 2209 52.28 19 25.68 155 20.12 5.26 19 4 .07 .8 1.1 KAO 1.2X 136 4  
 2001 JAN 13 0821 56.17 19 12.52 155 9.39 45.00 36 9 .10 1.0 1.1 DEP 1.8X 207 9

2001 JAN 13 1143 32.82 19 27.87 155 23.98 10.50 24 9 .09 .5 .8 KAO 1.4X 124 6  
 2001 JAN 13 1205 32.22 19 23.34 155 30.39 13.96 19 3 .09 .6 1.0 DML 1.4X 49 5  
 2001 JAN 13 2253 4.69 19 19.53 155 10.94 7.35 25 5 .11 .4 .6 SF3 1.3X 105 5  
 2001 JAN 14 0917 7.28 19 20.29 155 10.91 7.23 26 6 .09 .4 .6 SF3 1.3X 81 4  
 2001 JAN 14 1514 9.77 19 18.59 155 13.19 6.61 34 7 .12 .4 .8 SF2 1.9X 87 3

2001 JAN 15 0238 57.98 20 26.93 155 52.00 40.52 19 5 .13 1.9 1.5 DIS 1.6X 196 37  
 2001 JAN 15 0526 15.20 19 12.53 155 22.89 54.71 25 2 .15 1.2 2.4 DEPT 1.2X 159 4  
 2001 JAN 15 1123 52.34 19 17.57 155 24.87 6.64 37 8 .15 .3 1.1 SWR 1.3X 73 6  
 2001 JAN 15 2105 42.40 19 4.53 155 23.40 37.49 16 1 .12 1.5 2.7 LOI 1.3X 247 18  
 2001 JAN 16 0929 27.96 19 20.03 155 9.80 6.27 21 2 .08 .6 1.1 SF3 1.4X 95 4

2001 JAN 16 1034 45.15 19 22.18 155 29.99 12.80 22 4 .10 .4 1.0 KAO 1.2X 49 7  
 2001 JAN 17 0606 16.65 19 24.37 155 17.14 1.95 14 6 .10 .5 .3 SSCL 1.7X 115 1  
 2001 JAN 17 0837 42.35 19 36.08 156 18.29 17.88 34 4 .18 1.714.7 KON - 2.1X 222 42  
 2001 JAN 17 1022 22.34 19 25.29 155 19.52 6.71 27 6 .11 .4 .8 KAO 1.4X 72 3  
 2001 JAN 17 1439 42.43 19 23.25 155 1.84 7.48 20 2 .13 .9 .6 SF5 1.5X 168 4

2001 JAN 17 1603 58.90 19 19.25 155 11.28 6.55 20 4 .08 .5 1.2 SF3 1.1X 103 6  
 2001 JAN 17 1632 0.68 19 11.17 155 40.41 2.26 42 8 .15 .4 1.0 LSW 2.3X 99 10  
 2001 JAN 17 1653 54.81 19 47.28 155 8.27 39.10 4614 .11 .7 1.0 KEA 2.1X 189 15  
 2001 JAN 17 2216 1.33 19 22.66 155 1.47 7.96 25 3 .13 .8 .6 SF5 1.2X 184 6  
 2001 JAN 17 2322 41.09 19 10.65 155 27.84 35.16 27 3 .08 .7 1.3 DLS 1.3X 155 9

2001 JAN 18 0756 17.16 19 18.88 155 13.04 4.44 28 3 .11 .4 1.6 SSF 1.4X 86 4  
 2001 JAN 18 1257 28.18 19 22.32 155 29.86 6.74 4512 .11 .3 1.5 KAO 1.7X 51 13  
 2001 JAN 18 1426 18.53 20 27.93 155 52.77 27.79 28 5 .18 1.7 1.6 DIS 1.9X 197 31  
 2001 JAN 18 1626 50.49 19 58.12 155 36.04 26.29 19 4 .11 1.0 2.7 KOH 1.4X 153 26  
 2001 JAN 18 1801 44.11 19 13.80 155 32.76 5.02 26 5 .12 .5 1.4 LSW 1.4X 119 5

ORIGIN TIME (HST)	LAT	N	LON	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN				
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS

2001 JAN 18 1824 54.40 19 41.37 155 25.45 12.96 4813 .13 .3 .3 KEA 2.7X 68 11  
 2001 JAN 18 2012 3.58 19 29.18 155 26.22 7.59 4512 .12 .3 .7 KAO 2.7X 63 5  
 2001 JAN 18 2013 6.37 19 29.10 155 26.47 7.29 34 6 .12 .4 1.1 KAO 1.8X 48 6  
 2001 JAN 18 2105 23.76 19 7.99 155 20.49 54.37 26 2 .15 1.5 2.3 LOI 1.6X 222 13  
 2001 JAN 19 0104 29.96 19 10.19 155 41.19 1.23 24 2 .12 .4 1.0 LSW 1.3X 96 8

2001 JAN 19 0106 22.99 19 24.50 155 16.43 15.05 5015 .11 .4 .2 DEP 2.2X 42 1  
 2001 JAN 19 0746 26.56 19 22.99 155 29.82 8.59 32 4 .09 .4 1.3 KAO 1.5X 46 13  
 2001 JAN 19 1041 48.24 19 4.25 155 29.91 31.50 25 4 .09 .9 1.6 DLS 1.5X 184 20  
 2001 JAN 19 1452 53.83 19 20.04 155 8.37 7.66 4413 .10 .4 .5 SF4 2.0X 106 5  
 2001 JAN 19 1558 18.01 19 23.97 155 17.86 1.87 19 7 .10 .4 .3 SSCL 1.8X 132 2

2001 JAN 19 1618 33.33 19 13.19 155 28.30 6.40 35 7 .16 .5 1.1 LSW 1.6X 141 5  
 2001 JAN 19 2047 47.86 19 20.27 155 8.69 7.16 31 6 .07 .5 .6 SF4 1.3X 104 4  
 2001 JAN 20 0305 41.91 19 28.86 155 26.29 8.27 4011 .12 .4 .9 KAO 2.1X 49 6  
 2001 JAN 20 0519 53.20 19 12.26 155 41.91 7.83 32 6 .16 .4 1.1 LSW 1.6X 88 9  
 2001 JAN 20 1648 57.96 19 59.70 155 16.09 12.36 33 6 .12 1.3 .4 KEA 2.0X 279 14

2001 JAN 20 1747 47.15 18 48.92 155 16.09 50.62 30 4 .09 1.7 1.9 LOI 2.0X 277 46  
 2001 JAN 20 1824 17.01 19 13.43 155 28.51 8.45 28 5 .12 .6 .9 LSW 1.6X 178 4  
 2001 JAN 20 2123 24.73 19 20.69 155 12.75 7.86 36 7 .11 .4 .5 SF2 1.3X 114 4  
 2001 JAN 20 2358 45.04 19 25.41 155 29.36 8.14 38 7 .10 .3 1.1 KAO 1.7X 38 11  
 2001 JAN 21 0350 52.53 19 24.35 155 26.72 9.66 32 4 .13 .4 1.2 KAO 1.3X 53 11

2001 JAN 21 0522 28.28 19 16.82 155 28.34 10.13 36 5 .18 .4 .8 LSW 1.6X 91 4  
 2001 JAN 21 0554 27.33 19 20.12 155 7.04 7.54 26 4 .09 .5 .5 SF4 1.6X 165 5  
 2001 JAN 21 1826 47.17 19 29.10 155 26.33 7.94 39 9 .13 .4 .9 KAO 2.0X 63 5  
 2001 JAN 21 1906 2.89 19 19.52 155 7.44 7.48 35 9 .09 .4 .5 SF4 1.6X 138 4  
 2001 JAN 22 0413 46.23 19 18.89 155 13.26 8.74 4010 .11 .4 .6 SF2 2.1X 140 7

2001 JAN 22 0428 57.07 19 57.91 155 34.36 23.02 33 6 .11 .7 1.8 KOH 1.8X 152 24  
 2001 JAN 22 0954 43.69 19 29.50 154 53.33 2.50 30 5 .12 .6 1.4 SLEF 2.3X 110 5  
 2001 JAN 22 1340 29.82 19 19.20 155 12.88 9.60 37 9 .11 .4 .6 SF2 1.8X 135 6  
 2001 JAN 22 1351 1.83 19 18.53 155 12.91 8.96 30 5 .09 .6 .7 SF2 1.5X 161 8  
 2001 JAN 22 2149 29.95 19 16.13 155 32.04 5.08 30 5 .12 .4 1.1 LSW 1.3X 85 4

2001 JAN 23 0455 36.84 18 50.89 154 52.23 42.06 41 8 .12 1.3 2.2 DIS 2.3X 280 56  
 2001 JAN 23 1437 43.22 19 24.44 155 16.90 1.51 22 9 .09 .3 .2 SSC 1.6X 112 1  
 2001 JAN 23 2018 17.45 19 22.83 155 14.73 3.22 17 6 .06 .4 .3 SEC 1.4X 127 2  
 2001 JAN 23 2159 8.16 19 55.59 155 7.42 14.93 5315 .12 .6 .8 KEAF 2.8X 200 23  
 2001 JAN 24 0021 55.60 19 58.27 155 27.15 36.01 5014 .12 .7 1.0 KEA 2.2X 185 15

2001 JAN 24 0541 23.55 19 23.48 155 2.66 2.94 23 .09 .9 .5 SME 1.5X 172 3  
 2001 JAN 24 0542 23.80 19 11.41 155 33.57 0.57 21 5 .11 .4 .4 LSW 1.4X 133 9  
 2001 JAN 24 0933 48.23 19 23.39 155 17.65 11.23 22 3 .10 .7 .6 INTL 1.5X 87 1  
 2001 JAN 24 0939 52.42 19 19.72 155 8.13 6.63 27 3 .09 .5 .9 SF4 1.3X 117 4  
 2001 JAN 24 1138 0.33 19 20.42 155 7.20 7.45 36 7 .09 .4 .6 SF4 1.7X 135 5

2001 JAN 24 1530 16.83 19 13.63 155 3.59 46.77 4712 .12 1.0 .9 DEP 2.1X 219 10  
 2001 JAN 25 0639 38.77 20 1.19 155 33.15 1.35 20 6 .12 .8 .5 KEA 1.7X 186 26  
 2001 JAN 25 0711 42.12 19 23.97 155 2.80 3.09 32 5 .11 .6 .5 SME 2.0X 144 2  
 2001 JAN 25 0717 37.78 19 24.23 155 18.00 17.85 17 4 .16 1.6 1.1 DEPL 1.6X 73 2  
 2001 JAN 25 1243 26.34 19 20.24 155 13.12 5.75 24 3 .09 .4 .9 SF2 1.2X 66 4

ORIGIN TIME (HST)											
YEAR	MON	DA	HRS	MIN	LAT	N	LON	W	DEPTH	N	N
					DEG	MIN	DEG	MIN	RMS	RD	S
					KM		KM		ERH	SEC	LOC
									REMKS		PREF
									MAG		N
									RD	GAP	AZ
									DS		MIN

2001 JAN 25 1256 26.63 19 18.01 155 30.39 2.84 28 3 .11 .3 1.3 LSW 1.4X 66 5  
 2001 JAN 25 1301 54.01 19 18.48 155 15.07 5.62 27 2 .09 .4 1.1 SF1 1.2X 111 4  
 2001 JAN 25 1342 18.81 19 22.21 155 28.78 8.64 4210 .12 .3 1.3 KAO 1.8X 41 13  
 2001 JAN 25 1517 9.09 19 12.30 155 39.42 1.42 5012 .18 .4 .6 LSW 2.7X 101 13  
 2001 JAN 25 1531 15.36 19 27.87 154 56.54 46.48 4011 .11 .7 .7 LER 2.0X 111 2

2001 JAN 25 2205 13.06 19 24.99 155 3.15 3.76 21 5 .08 .6 .4 SME 1.4X 123 2  
 2001 JAN 26 0022 50.74 19 23.33 155 16.86 3.18 33 7 .09 .3 .2 SSC 1.7X 46 0  
 2001 JAN 26 0433 16.77 19 23.17 155 14.86 3.62 22 8 .08 .3 .3 SEC 1.7X 67 2  
 2001 JAN 26 1044 0.80 19 24.80 155 16.99 13.55 21 4 .07 .8 .6 DEPL 1.5X 98 0  
 2001 JAN 26 1324 54.59 19 23.60 155 17.67 15.65 24 6 .14 .9 .5 DEPL 1.5X 92 1

2001 JAN 26 1452 50.69 19 24.07 155 19.41 1.93 21 1 .11 .4 1.2 KAOL 1.5X 101 5  
 2001 JAN 26 1657 10.77 19 24.00 155 15.79 10.95 27 5 .13 .8 .6 INTL 1.7X 108 1  
 2001 JAN 26 1818 48.08 19 20.51 155 12.85 8.31 27 4 .12 .4 .5 SF2 1.3X 116 4  
 2001 JAN 26 1928 53.23 19 25.21 155 16.85 11.76 16 2 .11 1.1 1.0 INTL 1.4X 140 2  
 2001 JAN 26 1952 44.40 19 26.76 155 15.33 30.38 26 5 .10 .9 1.1 DEP 1.6X 148 4

2001 JAN 26 2038 54.56 19 24.83 155 17.74 14.24 20 5 .13 1.5 .6 DEPL 1.7X 134 1  
 2001 JAN 26 2201 40.88 19 25.12 155 17.25 11.75 21 3 .14 .7 .7 INTL 1.6X 117 3  
 2001 JAN 26 2354 6.13 19 25.26 155 16.35 14.22 27 6 .12 .7 .4 DEPL 1.6X 55 1  
 2001 JAN 27 0003 40.69 19 38.00 155 53.98 15.89 21 7 .11 1.3 .9 KON 1.5X 151 9  
 2001 JAN 27 0030 12.88 19 26.19 155 16.32 10.22 16 1 .10 .8 1.1 INTL 1.5X 148 4

2001 JAN 27 0126 48.08 19 24.83 155 17.02 13.28 21 5 .10 1.0 .6 DEPL 1.7X 81 0  
 2001 JAN 27 0525 27.00 19 23.14 155 17.03 3.52 22 3 .14 .4 .4 SSCL 1.2X 69 2  
 2001 JAN 27 0639 1.91 19 23.54 155 16.71 9.97 18 3 .08 .7 .6 INTL 1.4X 92 1  
 2001 JAN 27 0720 21.15 19 26.73 155 15.95 11.93 26 6 .11 .9 .6 INTL 1.6X 153 4  
 2001 JAN 27 0800 42.85 19 33.41 155 44.50 10.83 27 6 .12 .5 .6 KON 1.7X 83 17

2001 JAN 27 1001 58.37 19 24.22 155 18.99 13.94 26 6 .12 .9 .7 DEPL 1.8X 98 3  
 2001 JAN 27 1126 34.10 19 51.18 155 23.07 23.10 30 4 .09 .9 1.2 KEA 2.0X 156 6  
 2001 JAN 27 1157 22.30 19 25.99 155 16.64 12.91 20 5 .10 .9 .7 INTL 1.6X 145 2  
 2001 JAN 27 1306 19.38 19 24.08 155 15.22 14.50 17 1 .13 1.1 .4 DEPL 1.6X 114 2  
 2001 JAN 27 1426 32.07 19 25.48 155 16.33 12.51 25 5 .09 .7 .4 INTL 1.7X 87 2

2001 JAN 27 1507 1.67 19 24.39 155 15.82 12.74 23 5 .13 .9 .5 INTL 1.6X 124 2  
 2001 JAN 27 1649 5.83 19 24.48 155 17.24 10.12 28 7 .06 .5 .4 INTL 1.7X 57 1  
 2001 JAN 27 1734 27.20 19 25.33 155 16.22 7.77 14 2 .08 .7 1.0 INTL 1.4X 142 4  
 2001 JAN 27 1736 57.95 19 24.73 155 17.01 10.91 22 4 .09 .5 .5 INTL 1.5X 97 5  
 2001 JAN 27 1809 38.96 19 27.36 155 45.44 10.70 23 7 .12 .5 1.4 KON 1.3X 77 14

2001 JAN 27 1851 46.91 19 25.22 155 15.66 11.93 19 3 .12 .6 .6 INTL 1.7X 85 3  
 2001 JAN 27 1853 47.56 19 24.52 155 17.43 1.85 18 7 .10 .4 .2 SSCL 1.8X 157 1  
 2001 JAN 27 2038 32.41 19 12.98 155 32.67 8.78 40 9 .12 .5 .8 LSWF 1.6X 127 6  
 2001 JAN 27 2104 27.29 19 24.90 155 17.07 13.16 20 1 .12 .9 .6 DEPL 1.6X 133 0  
 2001 JAN 27 2110 6.72 19 23.97 155 15.87 12.65 24 7 .09 1.0 .5 INTL 1.7X 108 1

2001 JAN 27 2335 29.11 19 12.84 155 32.18 0.47 24 4 .14 .4 .4 LSW 1.5X 129 15  
 2001 JAN 28 0005 0.77 19 18.42 155 15.31 7.94 35 7 .09 .4 .6 SF1 1.4X 103 4  
 2001 JAN 28 0122 51.21 19 22.14 155 30.17 13.29 13 .09 .8 1.6 DML 1.5X 103 7  
 2001 JAN 28 0124 9.75 19 22.11 155 30.36 10.73 40 9 .12 .3 .8 KAO 1.8X 47 7  
 2001 JAN 28 0302 55.61 19 12.52 155 29.82 7.87 21 .11 .6 .8 LSW 1.6X 140 5

ORIGIN TIME (HST)											
YEAR	MON	DA	HRS	MIN	LAT	N	LON	W	DEPTH	N	N
					DEG	MIN	DEG	MIN	RMS	RD	S
					KM		KM		ERH	SEC	LOC
									REMKS		PREF
									MAG		N
									RD	GAP	AZ
									DS		MIN

2001 JAN 28 0306 32.94 19 13.11 155 30.26 7.48 29 3 .10 .4 1.0 LSW 1.7X 135 4  
 2001 JAN 28 0612 36.55 19 56.09 155 34.94 31.42 35 6 .12 1.0 1.2 KOH 2.0X 236 21  
 2001 JAN 28 0727 33.17 19 27.89 154 54.91 3.91 13 1 .07 1.0 .5 SLE 1.9X 158 1  
 2001 JAN 28 2245 11.13 19 5.20 155 16.60 48.00 33 2 .09 1.0 1.6 LOI 1.9X 213 21  
 2001 JAN 29 1031 42.52 19 20.65 155 8.57 9.41 24 3 .06 .4 .7 SF4 1.5X 105 3

2001 JAN 29 2305 57.16 19 20.11 155 7.22 7.15 27 6 .08 .5 .7 SF4 1.6X 137 5  
 2001 JAN 29 2336 40.93 19 25.63 155 16.64 13.39 20 5 .11 1.1 .6 DEPL 1.5X 152 1  
 2001 JAN 30 0033 8.31 19 22.33 155 17.01 12.01 23 5 .10 .9 .5 INTL 1.5X 108 2  
 2001 JAN 30 0315 18.59 19 25.55 155 12.93 20.57 23 5 .14 1.3 1.0 DEPL 1.9X 168 3  
 2001 JAN 30 0448 43.47 19 15.55 155 2.06 43.61 40 9 .12 .9 .7 DEP 1.8X 218 11

2001 JAN 30 1237 15.43 19 26.74 155 29.04 12.47 32 9 .10 .4 1.0 KAO 1.6X 47 8  
 2001 JAN 30 1915 44.18 19 29.00 155 26.62 8.13 3710 .13 .4 1.1 KAO 1.6X 62 6  
 2001 JAN 30 2215 44.18 19 16.04 155 25.42 37.59 32 4 .11 .6 1.4 DLS 1.4X 77 4  
 2001 JAN 31 0942 34.20 19 19.99 155 8.08 6.85 4714 .13 .4 .6 SF4 2.0X 118 5  
 2001 JAN 31 1121 54.63 19 10.71 155 31.44 8.59 21 3 .19 .8 1.7 LSW 1.4X 142 8

2001 JAN 31 1123 41.14 19 11.43 155 32.74 7.36 23 3 .12 .5 1.7 LSW 1.6X 134 8  
 2001 JAN 31 1511 15.73 19 19.53 155 14.86 5.99 28 7 .09 .3 .8 SF1 1.0X 88 5  
 2001 JAN 31 1606 27.64 19 23.89 155 13.14 14.28 15 1 .10 .8 .5 DEPL 1.8X 136 2  
 2001 JAN 31 1836 15.66 19 11.94 155 41.77 7.41 24 5 .18 .6 1.9 LSW 1.7X 91 9  
 2001 JAN 31 1941 42.68 19 25.15 155 16.42 14.16 28 7 .13 .8 .5 DEPL 1.7X 140 1

2001 JAN 31 2107 43.85 19 25.51 155 16.67 11.42 25 6 .12 .9 .6 INTL 1.7X 142 1  
 2001 JAN 31 2301 35.83 19 24.98 155 16.74 11.00 24 5 .09 .5 .4 INTL 1.5X 137 0  
 2001 JAN 31 2327 55.55 19 25.57 155 17.78 12.03 20 4 .15 .8 .7 INTL 1.7X 140 0  
 2001 FEB 1 0232 7.99 19 27.99 155 13.74 1.55 23 6 .13 .5 .8 GLNL 1.5X 208 8  
 2001 FEB 1 0333 47.43 19 23.93 155 16.64 11.29 23 4 .11 .6 .5 INTL 1.7X 106 0

2001 FEB 1 0602 58.17 19 27.33 155 16.60 6.71 14 2 .08 .6 1.6 INTL 1.6X 169 6  
 2001 FEB 1 0646 12.74 19 24.41 155 17.54 9.59 24 4 .10 .6 .5 INTL 1.5X 49 1  
 2001 FEB 1 0740 23.05 19 26.19 155 15.07 13.01 22 5 .10 .8 .6 DEPL 1.7X 163 4  
 2001 FEB 1 0824 22.69 19 19.14 155 10.00 10.28 28 6 .09 .5 .6 SF3 1.4X 106 5  
 2001 FEB 1 1221 35.40 19 24.08 155 29.66 11.35 22 3 .12 .5 1.3 KAO 1.5X 44 6

2001 FEB 1 1231 16.05 19 24.98 155 17.55 15.44 13 2 .11 .9 .6 DEPL 1.5X 140 6  
 2001 FEB 1 1300 27.15 19 31.70 155 44.08 8.80 19 4 .11 .8 1.8 KON .9X 122 15  
 2001 FEB 1 1337 2.69 19 24.11 155 18.87 4.11 17 1 .09 .5 1.4 SSCL 1.5X 108 4  
 2001 FEB 1 1400 34.67 19 31.87 155 35.44 7.21 20 6 .10 .5 .9 MLO 1.4X 112 5  
 2001 FEB 1 1451 4.74 19 22.52 155 20.56 9.88 21 5 .15 .6 1.1 KAOL 1.7X 135 7

2001 FEB 1 1717 13.02 19 25.57 155 16.75 14.63 25 7 .09 .9 .5 DEPL 1.8X 150 1  
 2001 FEB 1 1743 53.47 19 20.52 155 6.86 8.89 29 6 .12 .4 .5 SF4 1.6X 140 5  
 2001 FEB 1 2042 41.49 19 21.16 155 29.94 7.79 24 4 .12 .3 1.3 KAO 1.3X 42 9  
 2001 FEB 1 2151 3.27 19 13.77 155 26.17 6.98 24 1 .11 .6 1.1 LSW 1.2X 183 4  
 2001 FEB 1 2220 2.98 19 24.46 155 17.13 2.16 17 6 .11 .8 .2 SSCL 1.5X 115 1

2001 FEB 2 1131 35.04 19 28.66 155 26.28 4.80 35 9 .12 .3 2.1 KAO 1.7X 78 6  
 2001 FEB 2 1704 16.44 19 26.62 155 54.14 17.30 22 4 .12 1.4 1.9 KON 1.3X 172 5  
 2001 FEB 2 1845 41.68 19 24.56 155 16.76 11.95 26 9 .13 .6 .6 INTL 1.6X 94 1  
 2001 FEB 2 1909 37.69 19 24.60 155 15.48 10.89 11 3 .15 1.7 .6 INTL 1.3X 139 2  
 2001 FEB 2 2034 34.75 19 23.52 155 16.94 14.16 8 1 .05 1.1 .6 DEPL 1.5X 104 3

ORIGIN TIME (HST)												LAT N	LON W	DEPTH N	N RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD S	SEC KM	KM	REMKS	MAG	RD	GAP	DS					
2001	FEB	2	2334	10.27	19	18.55	155	13.40	5.48	23	3	.11	.4	1.0	SF2	1.3X	81	3				
2001	FEB	3	0021	23.24	19	26.10	155	14.04	11.24	12	3	.19	1.5	.8	INTL	1.3X	179	6				
2001	FEB	3	0149	27.25	19	22.79	155	17.79	11.97	12	3	.10	1.9	1.1	INTL	1.5X	125	3				
2001	FEB	3	0226	50.17	19	31.17	155	29.39	4.29	33	7	.12	.3	1.0	MLO	1.8X	65	3				
2001	FEB	3	0255	0.91	19	22.36	155	17.66	12.99	10	3	.14	1.4	1.3	INTL	1.6X	151	3				
2001	FEB	3	0341	51.20	19	23.79	155	18.77	10.43	10	2	.11	1.1	1.9	INTL	1.5X	86	4				
2001	FEB	3	0520	43.31	19	24.24	155	18.15	10.66	10	2	.06	.9	1.1	INTL	1.3X	84	2				
2001	FEB	3	0541	58.53	19	25.36	155	18.73	8.55	21	5	.11	.9	1.0	INT	1.3X	108	2				
2001	FEB	3	0709	51.56	19	24.09	155	17.24	9.14	14	3	.11	1.6	1.3	INTL	1.4X	157	2				
2001	FEB	3	1306	18.80	19	22.10	155	18.45	10.66	7	2	.04	1.7	2.1	INTL	1.6X	136	4				
2001	FEB	3	1434	15.86	19	24.18	155	17.93	7.11	12	3	.12	1.1	1.5	INTL	1.1X	169	5				
2001	FEB	3	1540	23.87	19	24.91	155	16.95	8.47	20	5	.08	.8	.7	INTL	1.2X	140	0				
2001	FEB	3	1639	29.01	19	23.78	155	18.52	8.92	19	3	.12	.7	1.0	INTL	1.5X	56	3				
2001	FEB	3	2142	20.57	19	27.50	155	13.98	12.73	10	2	.08	1.9	.8	INTL	1.6X	233	7				
2001	FEB	3	2239	26.95	19	20.11	155	10.47	7.80	28	4	.10	.4	.6	SF3	1.5X	84	4				
2001	FEB	3	2256	34.68	19	25.16	155	17.06	12.05	8	2	.10	2.7	1.4	INTL	1.6X	175	1				
2001	FEB	3	2300	13.48	19	20.04	155	10.33	8.34	3811	.11	.4	.4	SF3	1.9X	86	4					
2001	FEB	4	0038	56.12	19	23.96	155	16.17	10.05	14	4	.12	1.7	.8	INTL	1.6X	209	1				
2001	FEB	4	0229	29.75	19	57.67	155	36.53	11.67	28	4	.10	.7	.8	KOH	1.9X	148	26				
2001	FEB	4	0544	1.49	19	22.04	155	16.89	12.37	9	3	.11	1.9	1.6	INTL	1.7X	135	2				
2001	FEB	4	1543	52.01	19	23.86	155	16.30	10.03	11	3	.11	1.2	1.4	INTL	1.3X	99	1				
2001	FEB	4	1652	29.30	19	27.21	154	52.89	6.48	35	7	.13	.9	.6	LER	1.9X	198	4				
2001	FEB	4	1847	37.88	19	25.11	155	14.82	10.46	10	2	.12	1.7	.8	INTL	1.6X	205	5				
2001	FEB	4	2008	37.23	19	23.92	155	19.47	7.32	10	2	.14	2.3	2.8	KAOL	1.6X	157	4				
2001	FEB	5	0040	10.17	19	23.00	155	21.72	11.62	11	4	.15	2.3	3.2	KAOL	1.9X	179	8				
2001	FEB	5	0350	13.94	19	22.85	155	18.72	12.49	10	3	.08	2.0	1.3	INTL	1.5X	149	4				
2001	FEB	5	0417	4.84	19	24.68	155	18.97	9.33	8	3	.04	3.7	1.4	INTL	1.4X	194	3				
2001	FEB	5	0941	49.98	19	22.77	155	19.59	6.87	9	2	.09	1.0	2.0	KAOL	1.4X	165	6				
2001	FEB	5	1005	24.16	19	24.24	155	18.08	9.10	11	3	.09	1.7	1.9	INTL	1.3X	139	3				
2001	FEB	5	1134	10.57	19	50.95	155	19.06	9.68	9	2	.05	.9	1.2	KEA	1.7X	148	5				
2001	FEB	5	1738	57.13	19	20.46	155	18.33	17.64	31	7	.10	.6	.8	DEP	1.6X	61	5				
2001	FEB	6	0149	39.64	19	27.08	155	54.34	17.58	18	5	.10	1.3	1.7	KON	1.1X	174	4				
2001	FEB	6	0319	10.86	19	24.02	155	30.44	10.21	3911	.10	.3	1.1	KAO	1.5X	34	11					
2001	FEB	6	0434	34.29	19	3.70	156	19.79	36.51	4112	.13	1.2	2.1	KON	2.8X	288	53					
2001	FEB	6	1602	38.22	19	23.73	155	19.47	5.83	10	4	.14	.9	2.6	KAOL	1.2X	158	5				
2001	FEB	6	1657	15.78	19	51.24	155	41.06	12.83	10	3	.11	1.2	.7	KEA	1.2X	214	3				
2001	FEB	6	1858	43.62	19	26.29	155	14.89	12.40	10	2	.12	1.3	.9	INTL	1.3X	166	5				
2001	FEB	7	0033	17.73	19	27.44	155	14.48	31.61	5517	.12	.4	.6	DEPF	2.8X	51	4					
2001	FEB	7	0053	23.61	19	23.26	155	16.70	9.67	11	2	.07	.9	.8	INTL	1.5X	81	1				
2001	FEB	7	0255	47.90	19	19.68	155	36.97	13.05	4612	.11	.3	.4	DML	2.6X	55	6					
2001	FEB	7	0659	25.49	19	14.37	155	26.64	8.27	39	7	.15	.4	.8	LSW	1.8X	104	5				
2001	FEB	7	1817	7.72	19	23.73	155	16.00	7.99	9	3	.07	1.1	.9	INTL	1.1X	116	1				
2001	FEB	7	1926	41.23	19	19.51	155	13.44	8.15	34	6	.13	.5	.7	SF2	1.7X	131	6				
2001	FEB	7	2346	49.73	19	12.01	155	20.35	50.63	38	6	.12	.8	1.0	DEP	1.8X	170	8				

ORIGIN TIME (HST)												LAT N	LON W	DEPTH N	N RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD S	SEC KM	KM	REMKS	MAG	RD	GAP	DS					
2001	FEB	8	0156	50.36	19	25.22	155	24.32	8.39	16	4	.12	.5	1.8	KAO	1.2X	91	9				
2001	FEB	8	0505	43.57	19	32.68	156	5.80	44.20	39	6	.12	1.1	.9	KON	2.1X	208	20				
2001	FEB	8	0527	40.61	19	25.89	155	15.34	13.12	22	7	.08	1.0	.5	DEPL	1.7X	160	3				
2001	FEB	8	1209	21.61	19	20.37	155	8.33	7.45	21	5	.06	.4	.6	SF4	1.8X	111	4				
2001	FEB	8	1730	20.06	20	9.51	156	49.61	0.04	19	3	.12	4.1	.8	DIS	# 2.3X	261	75				
2001	FEB	8	1744	25.65	20	11.50	157	2.86	44.55	28	2	.18	2.3	4.9	DIS	2.9X	276	91				
2001	FEB	9	0208	0.79	19	18.05	155	30.20	8.08	27	6	.13	.4	1.1	LSW	1.4X	87	5				
2001	FEB	9	0645	50.70	19	13.84	155	21.73	6.97	15	4	.12	.8	.8	SWR	1.2X	212	4				
2001	FEB	9	1057	5.62	19	20.15	155	11.72	7.59	15	3	.06	.5	1.0	SF3	1.4X	80	5				
2001	FEB	9	1210	30.61	19	27.09	155	28.94	11.98	23	5	.13	.5	1.3	KAO	1.3X	60	8				
2001	FEB	9	1923	42.52	19	19.68	155	12.93	9.54	41	8	.13	.4	.5	SF2	2.7X	116	5				
2001	FEB	9	1924	7.94	19	18.47	155	13.09	6.37	23	7	.12	.4	.9	SF2	2.2X	92	3				
2001	FEB	9	2248	47.61	19	21.28	155	4.78	7.54	15	4	.09	.6	.8	SF5	1.5X	162	6				
2001	FEB	10	0738	30.05	19	22.97	155	15.02	3.17	12	3	.08	.4	.3	SEC	1.6X	126	2				
2001	FEB	10	1031	25.80	19	24.79	155	18.06	9.05	10	3	.15	1.4	1.8	INTL	1.1X	132	3				
2001	FEB	10	1250	17.35	19	54.72	155	12.90	13.42	32	6	.15	1.4	.6	KEA	1.8X	206	14				
2001	FEB	10	1350	55.09	19	17.26	154	58.41	40.92	28	7	.10	1.4	.8	LER	1.6X	254	15				
2001	FEB	10	1532	42.85	19	27.00	155	17.16	5.27	8	3	.10	1.8	2.0	INTL	1.5X	295	3				
2001	FEB	10	1613	22.42	19	18.06	154	58.96	41.31	21	6	.11	2.0	1.0	LER	1.4X	276	15				
2001	FEB	10	1951	15.04	19	8.70	155	27.20	30.53	41	7	.10	.6	1.1	DLS	1.8X	168	2				
2001	FEB	10	2333	27.53	19	29.28	154	54.14	0.02	15	4	.15	.4	.6	SLE	# 1.5X	106	4				
2001	FEB	10	2359	29.32	19	45.03	156	1.27	6.26	21	4	.12	1.0	1.0	HUA	1.8X	228	20				
2001	FEB	11	0019	22.26	19	20.53	155	10.45	8.16	37	8	.12	.4	.4	SF3	1.8X	77	3				
2001	FEB	11	0359	33.94	19	18.05	155	23.07	5.54	17	4	.14	.7	.3	SWR	1.8X	98	7				
2001	FEB	11	0610	55.96	19	26.93	155	15.27	16.87	8	2	.11	3.7	1.3	DEPL	1.7X	257	5				
2001	FEB	11	0654	58.48	19	21.24	155	18.05	3.57	13	5	.07	.4	.9	SWR	1.3X	140	4				
2001	FEB	11	0711	19.57	19	23.66	155	19.02	9.79	9	2	.13	3.6	2.0	INTL	1.5X	203	4				
2001	FEB																					

YEAR	MON	DA	HRMN	S	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS	
2001	FEB	13	0441	51.80	19	1.70	155	19.78	35.43	32	3	.08	1.1	1.7	LOI	1.6X	216	20	
2001	FEB	13	0647	4.80	19	22.35	155	27.87	6.31	30	6	.10	.3	.9	KAO	1.4X	58	1	
2001	FEB	13	1818	3.90	19	24.02	155	17.58	12.18	22	5	.14	.8	.5	INTL	1.7X	99	2	
2001	FEB	13	1832	48.89	19	29.03	155	27.48	9.07	21	6	.12	.4	1.1	KAO	1.6X	81	5	
2001	FEB	13	1925	25.87	19	30.57	155	50.18	12.52	21	7	.12	.5	.6	KON	1.4X	105	9	
2001	FEB	14	0024	1.37	19	22.35	155	22.79	8.67	18	6	.11	.8	1.3	KAOL	1.9X	159	11	
2001	FEB	14	0226	57.14	19	17.44	156	28.57	38.43	22	6	.12	2.2	3.2	DIS	2.4U	252	63	
2001	FEB	14	0426	30.31	19	22.48	155	19.89	7.51	22	7	.08	.7	1.1	KAOL	1.3X	123	5	
2001	FEB	14	1221	40.25	19	24.56	155	17.45	9.78	20	5	.12	1.3	.9	INTL	1.4X	82	1	
2001	FEB	14	2034	50.48	19	20.68	155	13.10	7.42	26	4	.10	.4	.6	SF2	1.3X	63	4	
2001	FEB	15	0635	14.54	19	50.94	155	51.02	37.57	25	4	.11	.8	1.3	HUA	1.9X	140	18	
2001	FEB	15	0849	12.89	19	19.46	155	8.74	8.05	34	8	.10	.3	.4	SF4	1.8X	101	4	
2001	FEB	15	0906	13.83	19	29.88	155	53.36	11.97	19	8	.12	.6	.7	KON	1.6X	123	3	
2001	FEB	15	1633	47.30	19	25.87	155	15.33	18.92	5	.02	3.6	6.7	DEPL	2.1X	208	6		
2001	FEB	15	1805	21.18	19	2.77	155	21.68	37.82	3910	.10	.9	.9	LOI	1.8X	213	16		
2001	FEB	15	2028	24.70	19	19.89	155	7.37	7.57	3610	.11	.4	.6	SF4	1.7X	136	5		
2001	FEB	15	2028	50.26	19	19.98	155	7.59	7.06	4513	.11	.4	.5	SF4	2.3X	130	5		
2001	FEB	15	2153	55.69	19	30.13	155	24.54	23.71	5111	.11	.4	.7	DML	3.2X	51	2		
2001	FEB	16	0011	31.43	19	27.93	155	16.41	7.08	9	3	.10	3.3	2.3	INT	1.3X	229	5	
2001	FEB	16	0323	32.68	20	0.21	155	35.67	44.94	19	4	.10	1.4	1.3	KOH	2.2X	169	24	
2001	FEB	16	0649	50.17	19	26.50	155	17.97	7.00	12	3	.08	2.0	1.0	INTL	1.5X	196	2	
2001	FEB	16	0716	46.92	19	27.06	155	17.81	5.30	12	3	.10	2.3	1.4	INT	1.3X	207	3	
2001	FEB	16	1633	25.52	19	24.17	155	16.83	10.58	12	3	.12	2.0	1.3	INTL	1.5X	125	1	
2001	FEB	16	1743	55.49	19	29.67	155	24.82	24.28	19	50	.11	.4	.7	DMLF	3.3X	51	3	
2001	FEB	16	1834	19.05	19	24.00	155	1.31	5.29	13	1	.10	.9	1.1	SF5	1.7X	199	5	
2001	FEB	16	2024	4.39	19	21.19	155	30.10	6.94	18	4	.12	.4	2.3	KAO	1.3X	85	8	
2001	FEB	16	2328	15.53	19	24.26	155	19.83	8.71	9	3	.08	2.8	2.0	KAOL	1.5X	214	4	
2001	FEB	17	0128	25.66	19	19.34	156	13.35	35.10	33	5	.10	1.3	1.3	KON	2.1X	236	37	
2001	FEB	17	0320	29.96	19	21.17	155	11.04	8.02	30	6	.12	.5	.6	SF3	1.8X	78	3	
2001	FEB	17	0558	39.27	19	19.47	155	11.56	7.52	4314	.16	.4	.6	SF3	2.0X	96	6		
2001	FEB	17	0814	50.12	19	25.40	155	19.01	5.96	21	5	.12	.9	1.3	INT	1.7X	83	2	
2001	FEB	17	0948	2.69	19	40.82	155	43.51	14.75	12	3	.10	1.2	.6	HUA	1.4X	194	12	
2001	FEB	17	1043	24.36	19	21.67	155	30.15	5.44	28	4	.10	.4	1.7	KAO	1.6X	76	5	
2001	FEB	17	1119	41.13	19	25.14	155	20.10	1.50	16	5	.11	.4	.8	KAO	1.4X	146	4	
2001	FEB	17	1127	5.24	19	25.46	155	18.96	5.83	22	6	.09	.6	1.1	INT	2.0X	133	2	
2001	FEB	17	1241	39.60	19	25.35	155	19.33	5.08	13	4	.07	1.4	1.4	KAO	1.3X	137	3	
2001	FEB	17	1419	13.28	19	25.03	155	20.23	0.68	12	3	.12	.4	.9	KAO	1.3X	164	5	
2001	FEB	17	1425	3.20	19	24.84	155	24.60	10.36	32	8	.10	.3	.8	KAO	1.5X	38	9	
2001	FEB	17	1651	22.10	18	59.39	155	29.84	38.45	25	6	.08	1.4	1.0	DLS	1.8X	234	18	
2001	FEB	17	1801	10.31	19	25.31	155	19.89	2.55	16	4	.14	.5	.7	KAO	1.4X	143	4	
2001	FEB	17	2008	26.37	19	25.75	155	19.08	5.24	16	6	.09	1.1	.6	KAO	1.5X	142	3	
2001	FEB	17	2139	9.83	19	25.69	155	19.16	4.34	15	3	.09	.5	.8	KAO	1.5X	137	3	
2001	FEB	17	2205	4.21	19	27.10	155	18.66	3.92	13	4	.18	2.8	1.0	SNC	1.2X	167	4	
2001	FEB	18	0001	54.88	19	14.71	155	27.56	4.58	29	2	.16	.5	2.1	LSW	1.3X	88	6	
2001	FEB	18	0036	48.80	19	25.99	155	18.64	6.04	34	7	.14	.5	.6	INT	1.7X	52	2	

YEAR	MON	DA	HRMN	S	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
2001	FEB	18	0042	42.22	19	25.62	155	18.91	5.15	31	6	.11	.4	.6	INT	1.5X	98	2	
2001	FEB	18	0148	47.81	19	25.86	155	18.65	6.15	34	8	.10	.4	.6	INT	2.0X	48	2	
2001	FEB	18	0606	56.07	19	29.41	154	53.39	0.03	28	1	.13	.4	1.0	SLEF#	1.9X	108	5	
2001	FEB	18	0636	42.40	19	22.81	155	30.40	15.10	19	4	.08	.5	.9	DML	1.2X	50	6	
2001	FEB	18	1230	46.92	19	25.52	155	19.11	5.15	31	8	.10	.4	.9	KAO	1.8X	50	3	
2001	FEB	18	1324	48.50	19	24.12	155	18.21	16.08	23	3	.15	.9	.6	DEPL	1.7X	79	3	
2001	FEB	18	1655	58.23	19	25.39	155	16.71	13.89	3311	.12	.6	.4	.4	DEPL	1.9X	87	1	
2001	FEB	18	1723	46.41	19	25.57	155	17.15	10.14	21	2	.13	.6	.8	INTL	1.6X	141	1	
2001	FEB	18	1725	10.59	19	11.58	155	28.22	33.35	42	9	.07	.6	1.0	DLS	2.0X	97	4	
2001	FEB	18	1729	30.11	19	24.17	155	17.84	8.80	17	3	.13	.8	1.1	INTL	1.4X	76	2	
2001	FEB	19	1749	15.70	19	25.90	155	15.15	13.44	15	2	.12	.4	1.1	DEPL	1.6X	198	3	
2001	FEB	19	2010	49.10	19	9.59	155	36.51	7.61	20	5	.13	.6	1.4	LSW	1.5X	129	15	
2001	FEB	19	2135	38.51	19	14.72	155	10.34	40.73	29	9	.11	1.3	1.8	HUA	2.3X	312	36	
2001	FEB	19	2326	10.64	19	25.28	155	17.00	10.84	16	4	.08	.9	.9	INTL	1.3X	149	1	
2001	FEB	19	0135	11.96	19	19.00	155	46.91	10.68	29	3	.12	.4	.6	KON	1.5X	84	11	
2001	FEB	19	0200	30.59	19	16.04	155	7.01	43.76	43	8	.12	.9	1.0	DEP	3.2X	190	3	
2001	FEB	19	0205	6.27	19	26.18	155	18.45	6.00	25	5	.11	.6	.8	INT	1.7X	75	2	
2001	FEB	19	0433	19.03	18	50.21	155	6.40	55.66	33	4	.11	1.6	2.5	LOI	2.3X	265	50	
2001	FEB	19	0509	52.06	19	21.35	155	19.60	29.89	41	9	.13	.6	.9	DEP	2.1X	47	6	
2001	FEB	19	0955	46.62	19	25.52	155	14.37	14.34	17	6	.14	1.6	.5	DEPL	2.0X	209	5	
2001	FEB	19	1020	38.63	19	19.99	155	16.94	33.73	29	6	.10	.8	1.4	DEP	1.6X	87	1	
2001	FEB	19	1331	28.56	19	25.70	155	18.53	16.87	12	3	.09	1.5	1.1	DEPL	1.9X	151	2	
2001	FEB	19	1340	59.95	19	24.12	155	17.70	9.82	12	3	.13	1.5	1.1	INTL	1.6X	135	2	
2001	FEB	19	1426	46.01	19	24.88	155	17.91	11.93	10	2	.14	1.4	1.3	INTL	1.6X	136	3	
2001	FEB	19	1604	39.33	19	21.77	155	26.74	14.27										

ORIGIN TIME (HST)												ORIGIN TIME (HST)																									
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS

2001 FEB 23 0714 30.83 19 54.39 155 23.06 9.06 30 6 .15 .9 .4 KEA 1.8X 229 5  
 2001 FEB 23 0716 43.68 19 54.48 155 23.41 8.68 27 7 .19 .9 .5 KEA 1.7X 229 5  
 2001 FEB 23 0718 50.53 19 55.53 155 22.98 2.92 33 8 .10 .6 1.0 KEA 1.9X 184 18  
 2001 FEB 23 0721 40.49 19 55.02 155 23.77 9.72 4212 12 .6 .4 KEA 2.2X 166 6  
 2001 FEB 23 0733 13.10 19 54.32 155 22.90 9.64 20 4 .14 .9 .4 KEA 1.5X 229 4

2001 FEB 23 0734 42.54 19 54.90 155 23.65 9.71 3510 11 .5 .3 KEA 2.0X 176 6  
 2001 FEB 23 0745 36.06 19 54.34 155 23.12 9.34 35 9 .16 .8 .3 KEA 2.0X 227 5  
 2001 FEB 23 0754 44.69 19 24.97 155 20.30 1.66 13 4 .07 .4 .9 KAO 1.3X 149 5  
 2001 FEB 23 1433 1.50 19 24.63 155 17.54 5.48 23 8 .14 .4 .5 INTL 1.2X 66 1  
 2001 FEB 23 1511 42.15 19 18.36 155 12.60 7.80 35 9 .13 .4 .8 SF2 1.4X 148 8

2001 FEB 23 1607 13.94 18 57.99 155 14.54 38.72 38 9 .09 .8 1.3 LOI 2.0X 245 34  
 2001 FEB 23 1731 21.59 19 18.33 155 12.67 8.72 35 8 .12 .5 .6 SF2 1.5X 148 8  
 2001 FEB 23 1747 5.40 19 54.37 155 22.73 10.90 13 2 .10 1.7 .5 KEA 1.3X 264 4  
 2001 FEB 24 0208 20.40 19 26.08 155 18.18 6.61 25 6 .10 .6 .6 INT 1.5X 150 2  
 2001 FEB 24 0309 56.48 19 53.76 155 24.37 5.98 23 6 .19 .9 1.4 KEA 1.6X 211 7

2001 FEB 24 0324 13.07 19 54.11 155 23.21 8.55 27 7 .14 .8 .5 KEA 1.7X 222 5  
 2001 FEB 24 0332 3.66 19 55.83 155 22.89 10.49 18 5 .12 1.0 .4 KEA 1.2X 243 6  
 2001 FEB 24 0345 29.09 19 53.86 155 22.83 9.02 21 2 .13 1.0 .4 KEA 1.5X 217 4  
 2001 FEB 24 0351 16.03 19 56.46 155 24.15 8.28 28 8 .21 .8 .8 KEA 1.9X 185 8  
 2001 FEB 24 0546 7.78 20 7.90 155 47.18 24.15 25 4 .09 .8 1.2 KOH 1.8X 158 1

4

2001 FEB 24 1631 14.33 19 26.16 155 17.01 13.31 34 8 .13 .6 .4 DEPL 1.8X 93 2  
 2001 FEB 24 1719 36.31 19 9.79 155 36.21 0.93 25 4 .14 .5 .6 LSW 1.5X 124 14  
 2001 FEB 24 1911 31.75 19 24.06 155 19.11 10.61 25 4 .10 .5 .8 KAOL 1.7X 69 4  
 2001 FEB 25 0007 14.26 19 28.99 155 26.46 10.59 3211 .13 .3 .7 KAO 1.5X 48 6  
 2001 FEB 25 0130 46.43 19 28.30 155 15.32 6.62 24 6 .10 .5 1.4 GLNL 1.5X 121 7

2001 FEB 25 0604 16.90 19 19.38 155 12.36 6.26 4112 .14 .3 .6 SF2 1.7X 90 5  
 2001 FEB 25 0919 59.99 19 25.58 155 16.26 11.72 35 7 .10 .4 .3 INTL 1.6X 52 2  
 2001 FEB 25 1240 12.01 19 27.37 155 24.25 7.95 3311 .12 .3 .9 KAO 1.5X 35 5  
 2001 FEB 25 1335 58.43 19 11.51 155 25.97 8.03 3913 .14 .3 .7 LSW 1.5X 105 4  
 2001 FEB 25 1413 36.46 19 24.61 155 17.61 9.61 6 1 .01 3.7 1.7 INTL 1.3X 187 5

2001 FEB 25 1512 5.47 19 31.53 155 15.18 25.86 4414 .13 .5 .8 DEP 1.7X 63 7  
 2001 FEB 25 1732 27.88 19 19.17 155 10.31 7.86 26 8 .09 .5 .8 SF3 1.4X 133 5  
 2001 FEB 25 2047 50.61 19 24.54 155 17.71 11.35 26 5 .11 .6 .5 INTL 1.5X 55 1  
 2001 FEB 25 2201 0.43 19 24.74 155 17.07 7.28 25 9 .09 .5 .5 INTL 1.4X 68 0  
 2001 FEB 26 0306 9.26 19 52.19 155 32.22 32.56 4311 .10 .6 1.1 KEA 2.2X 124 13

2001 FEB 26 0814 33.23 19 17.98 154 58.81 41.77 4711 .10 .8 .8 LER 2.8X 208 13  
 2001 FEB 26 1012 16.01 19 46.79 155 33.93 15.54 15 4 .09 .8 .6 KEA 1.4X 171 11  
 2001 FEB 26 1502 52.12 19 24.46 155 16.90 8.78 26 6 .10 .5 .3 INTL 1.5X 76 1  
 2001 FEB 27 0849 1.09 19 19.86 155 6.75 8.62 3711 .10 .4 .4 SF4 1.4X 143 5  
 2001 FEB 27 0923 23.98 19 23.80 155 16.66 3.07 10 3 .04 .6 .4 SSC 1.3X 133 0

2001 FEB 27 1845 43.50 19 25.03 155 17.49 7.64 26 5 .11 .6 .5 INTL 1.6X 46 1  
 2001 FEB 28 0032 8.83 20 1.51 155 34.34 2.54 29 9 .17 .6 .6 KOH 1.7X 168 24  
 2001 FEB 28 0416 35.21 19 24.81 155 15.86 12.78 32 7 .12 .6 .4 INTL 1.9X 96 2  
 2001 FEB 28 0642 56.01 19 25.76 155 16.15 10.26 23 6 .12 .7 .5 INTL 1.6X 104 2  
 2001 FEB 28 0657 23.11 19 23.52 155 18.97 9.09 20 5 .11 .6 .9 INTL 1.4X 121 4

ORIGIN TIME (HST)												ORIGIN TIME (HST)																									
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS

2001 FEB 28 0727 9.38 19 21.00 155 29.76 10.42 3912 .13 .3 .8 KAO 1.6X 44 5  
 2001 FEB 28 0731 2.64 19 21.10 155 29.87 9.02 4311 .08 .3 .7 KAO 2.0X 43 5  
 2001 FEB 28 1333 29.95 19 46.51 155 48.56 12.29 4312 .11 .4 .3 HUA 2.1X 134 10  
 2001 MAR 1 0152 49.52 19 24.92 155 30.11 10.96 3215 .10 .3 1.0 KAO 1.3X 43 10  
 2001 MAR 1 0253 47.26 19 24.79 155 30.10 11.80 3013 .15 .3 1.0 KAO 1.4X 44 5

2001 MAR 1 0625 53.25 19 24.36 155 18.29 8.07 19 7 .13 1.0 .6 INTL 1.5X 143 2  
 2001 MAR 1 0732 47.63 19 25.61 155 18.19 13.69 4217 .12 .3 .4 DEP 1.3X 95 1  
 2001 MAR 1 1826 3.80 19 14.13 155 33.13 5.72 5119 .19 .3 1.1 LSW 1.9X 71 6  
 2001 MAR 1 1949 48.17 19 20.37 155 7.34 8.11 3912 .13 .5 .6 SF4 1.8X 132 5  
 2001 MAR 2 0035 4.70 19 25.87 155 17.58 9.86 20 7 .10 .9 .6 INTL 1.6X 157 1

2001 MAR 2 0212 51.43 19 28.57 154 53.95 2.79 32 7 .12 .4 .4 SLE 1.7X 116 3  
 2001 MAR 2 0806 1.07 19 20.40 155 8.93 7.78 3111 .10 .3 .6 SF4 1.2X 100 3  
 2001 MAR 2 1132 22.35 19 44.00 156 29.19 40.48 4011 .14 1.2 1.9 DIS 2.4X 232 66  
 2001 MAR 2 1540 28.17 19 18.80 155 13.45 6.48 4017 .13 .4 .8 SF2 1.3X 142 7  
 2001 MAR 2 1718 51.33 19 20.11 155 8.06 7.49 5223 .12 .4 .5 SF4 1.6X 112 5

2001 MAR 2 1758 48.90 19 5.61 155 29.50 29.00 4811 .09 .6 .9 DLS 2.6X 176 8  
 2001 MAR 2 1837 37.28 19 21.11 154 54.97 39.21 5324 .11 .7 .6 LER 1.9X 214 10  
 2001 MAR 2 2045 6.69 19 22.97 155 18.30 9.01 2310 .19 .7 1.3 INTL 1.5X 141 3  
 2001 MAR 2 2244 41.75 19 18.83 155 13.17 6.66 35 7 .14 .5 .8 SF2 1.4X 83 3  
 2001 MAR 3 0515 44.53 20 56.59 155 37.50 1.03 17 6 .08 3.5 1.1 DIS 2.3X 271 75

2001 MAR 3 0549 1.59 19 12.09 155 22.04 10.26 29 3 .15 .8 .6 SWR 1.5X 186 5  
 2001 MAR 3 1025 59.54 19 20.93 155 6.87 6.81 3816 .08 .3 .6 SF4 1.1X 131 5  
 2001 MAR 3 2132 47.24 20 14.94 156 38.01 8.25 37 7 .14 .8 .8 DIS 2.4X 242 54  
 2001 MAR 3 2311 29.24 19 26.91 155 12.91 5.53 12 1 .12 1.6 4.1 GLNL 1.2X 247 8  
 2001 MAR 4 0229 7.66 19 21.16 155 6.66 7.87 4011 .09 .4 .4 SF4 2.2X 132 4

2001 MAR 4 0622 5.53 19 19.20 155 12.75 7.46 5019 .15 .3 .5 SF2 2.4X 86 4  
 2001 MAR 4 0741 16.28 19 19.26 155 12.69 7.70 39 8 .14 .5 .7 SF2 1.7X 87 4  
 2001 MAR 4 0742 7.04 19 10.40 155 40.50 0.90 34 7 .16 .6 .4 LSWF 2.2X 164 10  
 2001 MAR 5 0726 54.32 19 12.27 155 36.59 7.05 40 9 .16 .4 1.3 LSW 1.8X 86 12  
 2001 MAR 5 1304 22.31 19 12.63 155 30.86 36.32 6527 .10 .4 .6 DLS 2.7X 76 5

2001 MAR 5 1948 9.65 19 20.72 155 11.18 8.32 30 4 .09 .4 .5 SF3 1.7X 76 3  
 2001 MAR 5 2020 18.94 19 11.92 155 20.11 9.30 2913 .14 .6 .9 SWR 1.1X 225 8  
 2001 MAR 5 2154 54.99 19 26.85 155 28.88 9.98 3812 .12 .3 .8 KAO 1.6X 45 8  
 2001 MAR 6 0326 47.98 19 24.75 155 38.37 2.96 4620 .12 .3 .3 MLO 2.0X 65 1  
 2001 MAR 6 1840 55.62 19 19.18 155 13.05 7.67 5120 .14 .3 .5 SF2 1.9X 81 4

2001 MAR 6 2216 53.35 19 23.91 155 15.61 2.86 3512 .10 .2 .2 SECF 1.9X 80 2  
 2001 MAR 7 0518 17.12 19 20.01 155 9.78 7.51 17 5 .08 .5 .7 SF3 1.3X 95 4  
 2001 MAR 7 0735 46.33 19 23.12 155 29.48 10.50 6526 .11 .2 .3 KAO 2.7X 33 3  
 2001 MAR 7 0833 26.13 19 18.75 155 13.07 8.21 3617 .11 .3 .5 SF2 1.1X 87 3  
 2001 MAR 7 0954 28.23 19 25.32 155 29.87 11.59 2912 .09 .3 1.0 KAO 1.1X 42 10

2001 MAR 7 1406 42.20 19 19.21 155 9.67 6.87 3815 .10 .4 .7 SF3 1.4X 124 5  
 2001 MAR 7 2336 43.34 19 56.30 155 31.23 17.61 23 9 .14 1.0 2.6 KEA 1.3X 235 19  
 2001 MAR 8 0334 30.06 18 58.77 155 28.92 41.49 3115 .08 .7 .8 DLS 1.7X 245 19  
 2001 MAR 8 0417 56.43 21 41.42 157 4.65 5.09 24 7 .10 5.9 4.5 DIS 2.7X 249105  
 2001 MAR 8 0720 31.43 19 48.08 156 9.05 0.00 2812 .16 1.1 .3 HUA # 1.8X 197 66

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	GAP	DS							
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS									
2001	MAR	8	0736	28.77	19	56.00	155	30.72	20.41	2410	.12	.9	1.9	KEA	1.3X	233	18											
2001	MAR	8	0754	9.00	19	55.73	155	30.83	19.33	2311	.12	.8	1.7	KEA	1.1X	231	17											
2001	MAR	8	0831	55.62	19	14.72	155	27.97	3.62	36	5	.13	.4	1.6	LSW	1.9X	83	7										
2001	MAR	8	1216	4.33	19	23.54	155	27.41	9.76	2710	.13	.4	1.0	KAO	1.1X	68	2											
2001	MAR	8	2104	4.10	19	40.20	155	15.08	47.54	5121	.11	.5	.8	KEA	1.6X	102	24											
2001	MAR	9	0231	34.43	19	23.07	154	58.64	8.53	4017	.13	.7	.3	LER	1.4X	202	4											
2001	MAR	9	0526	8.78	19	22.47	155	14.33	3.35	21	9	.06	.3	.3	SEC	1.6X	125	2										
2001	MAR	9	0539	21.99	18	57.70	155	9.43	39.40	6127	.11	.6	1.2	LOI	1.8X	243	36											
2001	MAR	9	0823	34.38	19	19.29	155	10.45	8.96	4318	.09	.3	.5	SF3	1.3X	103	5											
2001	MAR	9	0840	59.40	19	19.59	155	10.93	6.29	5121	.11	.3	.5	SF3	1.8X	96	5											
2001	MAR	9	1121	42.57	19	19.26	155	30.42	2.64	36	5	.11	.3	1.0	KAO	1.5X	47	8										
2001	MAR	10	0800	5.99	19	16.92	155	13.25	5.48	2610	.08	.4	.7	SF2	1.2X	171	0											
2001	MAR	10	1515	42.04	19	8.56	155	31.61	50.09	4110	.12	.8	.9	DLST	2.3X	152	12											
2001	MAR	11	0505	8.73	19	14.02	155	29.77	6.70	5924	.19	.3	.6	LSWF	2.8X	72	2											
2001	MAR	11	0821	28.18	19	16.28	155	27.72	8.49	26	3	.13	.4	.7	LSW	1.4X	63	5										
2001	MAR	11	2358	9.98	19	18.20	155	14.75	2.68	3515	.10	.2	.4	SSF	1.0X	113	3											
2001	MAR	12	0029	4.54	19	24.52	155	16.56	9.04	25	6	.14	.6	.4	INTL	1.7X	135	1										
2001	MAR	12	0215	34.94	19	12.52	155	19.75	45.64	37	9	.10	.8	1.1	DEP	1.7X	169	8										
2001	MAR	12	0321	13.89	19	19.27	155	13.37	8.88	40	9	.12	.4	.4	SF2	2.0X	122	6										
2001	MAR	12	0943	10.56	19	25.19	155	16.34	11.53	16	1	.09	.8	1.2	INT	1.4X	163	1										
2001	MAR	12	1025	3.23	19	25.69	155	15.30	15.24	12	4	.11	1.0	1.3	DEPL	1.7X	185	4										
2001	MAR	12	1223	48.10	19	12.62	155	20.07	44.22	42	9	.09	.8	1.1	DEP	2.0X	168	8										
2001	MAR	12	1327	15.41	19	24.00	155	19.02	10.51	21	6	.07	.6	.7	INTL	1.1X	98	4										
2001	MAR	13	1038	22.13	19	22.58	155	26.68	11.79	6629	.11	.2	.4	KAO	2.2X	36	2											
2001	MAR	13	2351	10.33	19	14.87	155	27.20	25.74	4018	.13	.6	.8	DLS	1.4X	175	5											
2001	MAR	14	0610	35.05	19	17.55	155	29.01	6.49	3816	.15	.3	1.0	LSW	1.1X	48	5											
2001	MAR	14	1850	57.72	19	26.11	155	16.83	7.86	28	7	.13	.6	.5	INTL	1.3X	123	2										
2001	MAR	15	0019	45.73	19	20.19	155	30.07	8.73	5526	.13	.2	.6	KAO	1.4X	46	6											
2001	MAR	15	0122	10.83	19	17.74	155	13.03	8.34	32	7	.12	.4	.6	SF2	1.5X	116	2										
2001	MAR	15	0143	14.09	19	18.39	155	12.86	8.01	4118	.12	.4	.5	SF2	1.1X	101	3											
2001	MAR	15	1951	15.98	19	15.94	155	27.37	8.16	3913	.15	.3	.5	LSW	1.4X	134	5											
2001	MAR	16	0454	2.44	19	26.03	155	16.48	8.03	25	5	.15	.5	.5	INTL	1.6X	147	2										
2001	MAR	16	0456	36.59	19	26.75	155	15.17	7.18	24	6	.12	.4	.7	INTL	1.5X	156	5										
2001	MAR	16	0602	32.72	19	25.31	155	16.45	11.11	20	6	.13	1.0	.7	INTL	1.6X	164	1										
2001	MAR	16	1404	22.06	19	13.84	155	18.94	41.79	3715	.10	1.0	.9	DEP	1.5X	205	8											
2001	MAR	16	1436	22.90	19	18.76	155	13.00	8.32	4314	.12	.4	.4	SF2	1.7X	89	3											
2001	MAR	17	0155	22.36	19	25.90	155	24.45	9.90	4415	.10	.3	.7	KAO	1.5X	46	7											
2001	MAR	17	0540	16.80	19	19.33	155	15.17	5.10	27	7	.10	.3	1.2	SF1	1.2X	103	5										
2001	MAR	17	0543	27.01	19	18.70	155	15.52	7.85	3010	.10	.4	.7	SF1	1.3X	112	5											
2001	MAR	17	1216	27.55	19	5.26	155	8.58	20.54	3310	.09	.9	1.7	LOI	1.9X	273	22											
2001	MAR	17	1448	27.37	19	33.27	156	23.57	6.30	21	7	.15	1.5	1.9	DIS	2.7X	237	50										
2001	MAR	18	1954	9.29	19	3.57	155	30.04	44.02	23	6	.18	1.7	1.3	DLSL	2.0X	242	12										
2001	MAR	18	2229	12.77	19	20.14	155	7.09	9.29	42	9	.08	.4	.4	SF4	1.8X	133	5										
2001	MAR	19	1313	18.76	19	10.49	155	36.52	8.79	33	1	.17	.5	1.5	LSW	1.8X	100	14										
2001	MAR	19	1358	45.30	19	4.96	155	29.37	31.87	4813	.11	.7	.8	DLS	2.0X	181	9											

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	GAP	DS									
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS											
2001	MAR	19	2034	30.32	19	18.52	155	15.18	5.04	3110	.12	.4	1.4	SF1	1.0X	112	4													
2001	MAR	20	0110	48.79	19	23.08	155	16.21	25.52	4410	.12	.5	.7	DEP	2.0X	48	1													
2001	MAR	20	0437	42.39	19	27.89	154	53.39	6.43	32	2	.16	.9	.6	LER	1.6X	131	3												
2001	MAR	20	1508	11.28	19	24.92	155	39.17	2.70	28	8	.12	.3	.4	MLO	1.9X	125	3												
2001	MAR	20	1940	42.27	19	46.26	155	33.99	13.61	3511	.18	.6	.5	KEA	1.6X	89	11													
2001	MAR	21	1453	34.50	19	22.95	155	14.72	3.32	23	9	.08	.3	.4	SEC	1.5X	71	2												
2001	MAR	21	1940	20.55	19	25.39	155	18.79	6.75	5416	.11	.3	.4	INTF	2.7X	42	2													
2001	MAR	21	1941	12.15	19	24.92	155	18.90	6.72	24	7	.14	.5	.7	INT	2.3X	98	2												
2001	MAR	21	2158	7.93	19	15.46	155	16.49	39.36	39	7	.12	.9	1.1	DEP	1.6X	166	6												
2001	MAR	22	0624	44.07	19	23.89	155	15.41	1.25	13	5	.05	.3	.6	SEC	1.0X	147	2												
2001	MAR	22	0635	59.72	19	23.77	155	15.41	1.68	25	7	.10	.3	.3	SEC	1.5X	94	2												
2001	MAR	22	0924	24.24	19	21.00	155	8.69	8.63	4811	.12	.4	.4	SF4F	2.9X	161	3													
2001	MAR	22	1211	18.97	19	17.45	155	22.86	3.21	15	6	.08	.3	.8	SWR	1.8X	116	5												
2001	MAR	22	2259	52.45	19	25.49	155	16.75	9.26	23	7	.11	.6	.6	INTL	2.4X	151	1												
2001	MAR	22	2349	11.47	19	18.93	155	8.76	9.21	4514	.10	.3	.3																	

ORIGIN TIME (HST)																			
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKs	MAG	RD	GAP	DS

2001 MAR 26 1244 37.54 19 14.28 155 27.16 9.09 19 3 .10 .7 .7 LSW 1.2X 166 5  
 2001 MAR 26 1339 18.42 19 22.08 155 29.48 10.66 25 3 .11 .4 1.1 KAO 1.0X 46 8  
 2001 MAR 26 1457 45.14 19 24.48 155 17.44 12.23 23 5 .10 .6 .5 INTL 1.6X 53 1  
 2001 MAR 26 1516 23.59 19 24.98 155 16.86 11.73 27 5 .10 .5 .4 INTL 1.5X 84 0  
 2001 MAR 26 1616 44.25 19 24.39 155 17.50 1.82 12 3 .07 .5 .3 SSCL 1.1X 139 1

2001 MAR 26 2239 9.21 19 19.39 155 8.37 7.58 34 6 .09 .5 .5 SF4 1.4X 111 4  
 2001 MAR 27 0135 47.82 19 18.12 155 12.58 9.44 38 8 .11 .4 .6 SF2 1.3X 135 8  
 2001 MAR 27 0155 58.89 19 22.29 155 29.57 9.40 24 6 .12 .4 1.0 KAO 1.2X 45 8  
 2001 MAR 27 0837 9.42 19 25.03 155 15.98 0.30 23 6 .10 .2 .3 SNCL 2.1X 178 2  
 2001 MAR 27 1350 11.95 19 29.32 155 16.42 24.25 4410 .09 .6 .7 DEP 1.9X 103 3

2001 MAR 27 1447 47.22 19 24.67 155 16.88 8.47 27 6 .07 .4 .4 INT 1.4X 51 0  
 2001 MAR 27 1538 50.70 19 23.44 155 17.86 12.25 19 4 .11 1.1 1.2 INTL 1.7X 93 4  
 2001 MAR 27 1743 56.85 19 15.29 155 33.64 10.60 18 .10 .6 1.6 LSW 1.1X 107 6  
 2001 MAR 28 0403 12.24 19 20.26 155 11.74 8.28 3710 .09 .4 .5 SF3 1.4X 123 5  
 2001 MAR 28 0843 19.98 19 24.68 155 17.41 13.11 23 5 .09 .9 .7 DEPL 1.6X 74 1

2001 MAR 28 1435 53.73 19 20.07 155 11.53 8.74 4412 .12 .4 .5 SF3 2.2X 104 5  
 2001 MAR 28 1445 44.21 19 17.75 155 23.23 2.94 27 4 .13 .4 .9 SWR 1.5X 106 5  
 2001 MAR 28 1517 18.62 19 19.66 155 11.76 7.66 33 7 .08 .5 .7 SF3 1.4X 134 6  
 2001 MAR 28 2325 25.72 19 10.51 155 29.28 30.93 22 4 .08 .8 1.8 DLS 1.5X 163 9  
 2001 MAR 29 0321 2.64 19 13.51 155 1.88 49.55 35 2 .11 1.1 1.7 DEP 2.1X 214 13

46  
 2001 MAR 29 0744 39.13 19 46.15 156 8.90 32.41 21 .13 1.5 3.4 HUA 2.1X 195 34  
 2001 MAR 29 1640 16.71 19 25.93 155 15.70 15.05 34 9 .12 .6 .4 DEPL 1.9X 59 3  
 2001 MAR 30 0104 3.79 19 29.53 154 53.58 0.18 41 9 .15 .4 .3 SLEF 2.2X 111 5  
 2001 MAR 30 0441 24.32 19 23.48 155 25.70 9.96 28 3 .11 .4 1.1 KAO 1.4X 56 7  
 2001 MAR 30 0518 28.96 19 18.38 155 14.10 8.99 40 8 .13 .4 .6 SF2 1.6X 133 8

2001 MAR 30 1249 54.36 18 51.42 155 15.22 12.07 23 2 .09 2.2 1.6 LOI 1.9X 274 40  
 2001 MAR 30 1320 25.74 19 27.78 155 25.07 10.19 28 7 .08 .4 .8 KAO 1.5X 38 5  
 2001 MAR 30 1423 6.57 19 25.56 155 15.57 12.89 31 7 .07 .6 .5 INTL 1.9X 105 3  
 2001 MAR 30 1845 7.34 19 7.84 156 19.04 40.97 41 9 .10 1.0 1.4 KON 2.2X 283 49  
 2001 MAR 30 2218 50.51 20 16.25 154 39.20 18.47 27 4 .15 1.611.5 DIS 2.1X 279 74

2001 MAR 30 2331 49.69 19 54.12 155 44.16 35.87 31 6 .09 .7 1.2 HUA 1.5X 119 25  
 2001 MAR 31 0016 22.30 19 22.48 155 29.05 8.43 23 4 .09 .4 .9 KAO 1.1X 43 3  
 2001 MAR 31 0456 48.21 19 25.47 155 16.51 14.64 17 2 .12 1.2 .6 DEPL 1.6X 160 2  
 2001 MAR 31 0525 41.93 19 13.20 155 16.53 32.09 37 5 .10 .8 1.2 DEP 1.6X 175 9  
 2001 MAR 31 0725 5.39 19 25.65 155 14.29 14.09 24 5 .10 .9 .3 DEPL 1.8X 160 5

2001 MAR 31 0729 45.71 19 19.64 155 10.79 6.84 14 1 .05 .5 1.2 SF3 .9X 95 5  
 2001 MAR 31 1149 26.78 19 20.45 155 11.33 8.22 4210 .10 .4 .5 SF3 1.7X 77 4  
 2001 MAR 31 1211 43.15 19 19.70 155 2.83 7.05 29 3 .14 .7 .7 SF5 1.1X 191 9  
 2001 MAR 31 1402 17.79 19 11.90 155 33.63 8.01 21 3 .12 .8 1.1 LSW 1.4X 215 9  
 2001 MAR 31 1840 10.99 19 26.56 155 37.34 2.12 14 3 .07 .6 .4 MLOL 1.6X 178 2

2001 MAR 31 1923 58.01 19 12.88 155 31.12 10.17 16 2 .13 .6 1.6 LSW 1.3X 74 4  
 2001 MAR 31 2023 14.07 19 26.60 155 28.89 10.34 28 7 .11 .4 .9 KAO 1.4X 58 8  
 2001 APR 1 0722 54.76 19 22.40 155 29.92 9.24 34 5 .08 .3 .9 KAO 1.4X 48 4  
 2001 APR 1 0753 49.23 19 12.27 155 33.46 7.21 17 3 .13 .9 1.0 LSW 1.1X 209 8  
 2001 APR 1 1018 54.94 19 17.19 155 29.38 6.89 27 4 .16 .4 1.1 LSW 1.8U 50 4

ORIGIN TIME (HST)																			
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKs	MAG	RD	GAP	DS

2001 APR 1 1626 4.30 19 50.20 155 30.23 18.99 16 1 .11 1.0 1.6 KEA 1.8X 185 8  
 2001 APR 1 1631 53.05 19 19.00 155 10.92 4.78 22 3 .10 .8 2.9 SSF 1.1X 212 6  
 2001 APR 1 1715 45.59 19 19.83 155 7.73 5.63 22 2 .10 .5 1.2 SF4 1.4X 121 5  
 2001 APR 1 1948 45.24 19 18.13 155 22.11 8.07 17 1 .13 .6 1.0 SWR 1.0X 114 4  
 2001 APR 1 2325 35.91 19 30.57 155 46.78 10.67 19 2 .10 .6 1.4 KON 1.5X 82 15

2001 APR 2 0006 50.92 19 17.79 155 13.86 0.10 37 8 .13 .4 .3 SSF 1.4X 157 8  
 2001 APR 2 0110 8.48 19 18.68 155 14.08 9.32 38 5 .12 .4 .5 SF2F 2.5X 130 7  
 2001 APR 2 0135 9.97 19 30.10 155 43.43 5.56 23 6 .12 .6 3.0 KON 1.3X 71 13  
 2001 APR 2 0722 23.86 19 20.08 155 10.75 8.98 35 7 .10 .5 .5 SF3 1.4X 118 4  
 2001 APR 2 0852 49.60 19 30.60 155 15.38 25.09 5212 .11 .4 .7 DEPF 2.8X 60 6

2001 APR 2 1100 30.63 19 51.23 155 31.78 22.16 30 6 .11 .8 1.3 KEA 1.8X 197 11  
 2001 APR 2 1103 23.28 19 19.88 155 15.06 5.91 34 6 .12 .4 .8 SF1 1.3X 119 4  
 2001 APR 2 1708 37.19 18 48.90 155 8.63 56.24 30 6 .09 1.7 1.8 LOI 2.1X 266 53  
 2001 APR 2 1835 55.55 19 25.30 155 19.93 3.86 22 5 .08 .4 .9 KAO 1.3X 104 4  
 2001 APR 2 2129 41.81 19 50.42 155 30.14 19.70 19 5 .14 .8 1.2 KEA 1.5X 186 8

2001 APR 2 2355 38.68 19 19.67 155 7.06 7.08 38 9 .08 .4 .6 SF4 1.7X 138 5  
 2001 APR 3 0817 18.55 19 42.60 155 25.04 27.49 17 3 .09 .9 1.0 KEA 1.5X 129 9  
 2001 APR 3 1450 27.88 19 12.33 155 32.79 3.17 38 6 .11 .4 1.1 LSW 1.7X 130 7  
 2001 APR 4 0109 36.30 19 26.28 155 25.33 10.61 35 7 .10 .4 .7 KAO 1.3X 41 7  
 2001 APR 4 0216 50.99 19 20.27 155 26.16 10.92 37 7 .11 .3 .8 KAO 1.2X 54 5

2001 APR 4 0432 23.79 19 23.12 155 17.10 2.78 15 4 .09 .4 .3 SSC 1.4X 75 1  
 2001 APR 4 0652 18.84 19 45.21 156 0.56 7.84 21 .12 2.8 1.1 HUA 2.2X 273 19  
 2001 APR 4 0730 21.82 19 18.17 155 12.91 9.56 4111 .13 .4 .6 SF2 1.9X 135 8  
 2001 APR 4 1738 28.76 19 26.06 155 22.40 8.84 31 6 .14 .4 1.0 KAO 1.6X 48 4  
 2001 APR 5 0742 18.81 19 21.94 155 11.39 3.46 33 7 .08 .3 .4 SER 1.7X 73 3

2001 APR 5 1001 20.45 19 13.94 155 31.31 0.68 38 6 .12 .4 .4 LSW 1.6X 123 13  
 2001 APR 5 1113 40.71 19 28.26 155 8.61 24.34 30 7 .10 1.1 1.0 DEP 1.7X 92 9  
 2001 APR 5 1258 6.13 19 16.73 155 29.30 11.32 3610 .13 .4 .7 LSW 1.5X 91 3  
 2001 APR 5 1653 21.48 19 19.79 155 7.87 7.82 34 3 .09 .5 .7 SF4 1.6X 124 5  
 2001 APR 5 1859 32.48 19 29.60 155 25.64 5.48 29 6 .14 .4 1.2 KAO 1.4X 50 4

2001 APR 5 2143 0.20 19 22.20 155 28.52 4.28 38 9 .11 .3 .9 KAO 1.6X 42 2  
 2001 APR 5 2157 13.12 19 21.74 155 13.02 3.24 14 3 .04 .6 .4 SER 1.3X 152 2  
 2001 APR 5 2236 17.84 19 19.38 155 13.42 8.29 43 9 .11 .4 .6 SF2 1.5X 133 6  
 2001 APR 6 0633 37.56 19 20.43 155 7.98 8.50 38 8 .09 .5 .5 SF4 1.9X 113 4  
 2001 APR 6 2011 10.48 19 24.72 155 16.86 11.08 24 4 .13 .8 .6 INTL 1.6X 128 0

2001 APR 7 0114 5.92 19 25.28 155 16.67 10.99 27 4 .12 .8 .5 INTL 1.5X 136 1  
 2001 APR 7 0202 20.53 19 24.54 155 15.51 9.40 19 3 .07 1.3 .6 INTL 1.6X 237 2  
 2001 APR 7 0258 25.58 19 22.51 155 17.99 9.18 20 5 .10 .7 .8 INTL 1.6X 95 2  
 2001 APR 7 0537 49.13 20 4.96 155 46.29 20.73 25 5 .12 .9 1.8 KOH 1.6X 125 5  
 2001 APR 7 1235 48.99 19 18.96 155 30.54 4.24 25 4 .14 .4 3.7 LSW 1.6X 63 7

2001 APR 7 1450 17.02 19 22.02 155 4.74 6.93 4210 .14 .6 .7 SF5 1.5X 147 4  
 2001 APR 7 1825 24.14 19 19.52 155 12.83 9.04 36 4 .13 .5 .6 SF2 1.8X 130 6  
 2001 APR 7 1948 31.53 19 22.24 155 10.65 3.29 20 5 .07 .5 .4 SER 1.6X 124 1  
 2001 APR 8 0602 56.53 19 12.12 155 32.33 5.12 29 1 .22 .8 2.7 LSW 1.9X 137 7  
 2001 APR 8 1357 40.93 19 20.43 155 4.33 7.81 32 5 .10 .6 .8 SF5 1.6X 169 7

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS

2001 APR 9 0725 14.13 19 17.84 155 28.73 5.68 35 6 .14 .4 1.5 LSW 1.6X 78 6  
 2001 APR 9 1042 59.74 19 20.45 155 8.19 7.46 34 6 .09 .5 .6 SF4 1.6X 109 4  
 2001 APR 9 2123 12.37 19 12.32 155 32.52 7.08 29 4 .14 .5 1.3 LSW 1.3X 135 7  
 2001 APR 10 0228 7.54 19 29.88 155 26.41 12.25 21 5 .17 .5 1.0 KAO 1.4X 94 4  
 2001 APR 10 0802 42.16 19 22.76 155 4.68 2.52 18 6 .06 .5 .6 SME 1.6X 143 3

2001 APR 10 1156 27.85 19 12.89 155 42.63 0.02 32 4 .23 .6 .5 LSW # 2.0X 84 9  
 2001 APR 10 2020 54.79 19 18.83 155 13.07 7.83 4010 .13 .4 .8 SF2 1.6X 141 7  
 2001 APR 10 2052 21.52 19 19.19 155 12.35 7.48 32 5 .09 .5 .8 SF2 1.3X 134 6  
 2001 APR 10 2315 57.61 19 15.26 155 26.96 8.78 22 3 .13 .6 .7 LSW 1.1X 144 5  
 2001 APR 11 0211 24.35 19 13.02 155 30.96 6.96 4411 .16 .4 .8 LSW 1.8X 134 4

2001 APR 11 0315 31.64 19 20.83 155 5.93 7.05 28 4 .11 .6 .7 SF4 1.2X 152 5  
 2001 APR 11 0813 16.09 19 20.96 155 6.20 8.42 26 3 .11 .6 .7 SF4 1.5X 146 5  
 2001 APR 11 1600 48.48 19 21.78 155 6.33 7.72 4110 .10 .5 .6 SF4 2.1X 132 4  
 2001 APR 11 1643 50.25 19 20.55 155 11.33 9.91 4410 .10 .4 .4 SF3 2.0X 77 4  
 2001 APR 11 1657 34.15 20 31.52 155 17.69 29.13 27 7 .12 1.2 4.0 DIS 2.0X 240 67

2001 APR 12 0001 19.09 19 20.69 155 7.01 7.21 35 8 .11 .5 .7 SF4 1.5X 135 5  
 2001 APR 12 0241 43.82 19 21.95 155 29.59 12.94 26 5 .12 .4 .7 KAO 1.4X 70 8  
 2001 APR 12 0421 30.74 19 20.61 155 8.05 8.79 24 2 .08 .5 .7 SF4 1.2X 116 4  
 2001 APR 12 1832 27.14 19 28.62 155 25.20 5.94 34 6 .12 .4 1.2 KAO 1.6X 47 4  
 2001 APR 12 1853 19.81 19 20.25 155 8.39 7.45 39 8 .11 .5 .7 SF4 1.7X 105 4

2001 APR 13 1700 29.52 19 8.92 155 26.27 40.38 29 4 .10 1.0 1.5 DLS 1.7X 234 3  
 2001 APR 14 1403 47.48 19 26.91 155 19.51 2.77 35 8 .11 .4 .3 KAO 1.6X 74 2  
 2001 APR 15 0348 40.10 19 12.55 155 37.52 5.70 40 7 .13 .4 1.1 LSW 2.0X 82 14  
 2001 APR 15 1116 57.89 18 59.96 155 21.81 47.00 5114 .10 .7 .9 LOI 2.1X 221 27  
 2001 APR 15 1309 39.21 19 57.20 157 38.36 0.01 4411 .11 5.7 1.4 DIS # 3.2X 299157

2001 APR 15 1644 52.70 19 19.24 155 11.66 7.30 39 8 .08 .4 .6 SF3 1.4X 130 6  
 2001 APR 15 2256 50.45 19 19.80 155 7.86 7.22 40 9 .09 .4 .6 SF4 1.6X 119 5  
 2001 APR 15 2333 16.71 19 24.43 155 17.11 1.79 16 4 .04 .3 .2 SSC 1.3X 78 1  
 2001 APR 16 0029 59.71 19 3.81 155 23.45 35.55 23 5 .09 1.5 1.0 LOI 1.7X 268 19  
 2001 APR 16 0418 1.57 19 47.31 155 32.43 23.84 49 8 .11 .4 1.2 KEAF 3.3X 94 9

2001 APR 16 0434 59.92 19 48.21 155 32.65 26.92 26 6 .08 .6 .9 KEA 1.5X 99 9  
 2001 APR 16 1008 57.01 19 36.18 155 7.81 0.73 34 6 .12 .4 .4 HIL 1.4X 98 15  
 2001 APR 16 1015 24.21 19 44.40 155 23.71 10.37 18 2 .13 .7 1.6 KEA 1.4X 78 8  
 2001 APR 16 1222 25.30 19 47.93 155 32.45 27.27 29 5 .12 .8 1.5 KEA 1.7X 175 9  
 2001 APR 16 1336 11.27 19 27.07 155 12.59 10.58 4511 .09 .4 .5 GLN 1.5X 54 5

2001 APR 16 1506 59.91 19 57.99 155 34.03 10.97 30 6 .17 .8 .5 KOH 1.8X 160 24  
 2001 APR 16 1838 44.00 19 38.24 154 56.31 37.70 5212 .11 .7 1.0 HIL 2.8X 198 12  
 2001 APR 16 1932 34.50 19 25.21 155 19.32 5.68 34 6 .11 .4 .9 KAO 1.6X 46 3  
 2001 APR 16 1955 8.22 19 22.42 155 29.66 12.73 21 4 .09 .5 1.2 KAO 1.3X 70 7  
 2001 APR 17 0534 18.29 19 10.87 155 33.28 33.76 4010 .11 .6 1.1 DLS 1.7X 134 10

2001 APR 17 0635 54.99 19 46.36 155 45.64 15.45 30 6 .14 .9 1.3 HUA 1.5X 137 12  
 2001 APR 17 0644 11.19 19 14.28 155 35.75 1.57 36 9 .15 .4 .6 LSW 1.3X 106 10  
 2001 APR 17 1139 35.26 19 25.34 155 19.80 5.40 34 6 .12 .4 1.1 KAO 1.6X 46 4  
 2001 APR 17 1326 13.72 19 6.45 155 28.46 31.18 39 8 .09 .7 1.1 DLS 1.7X 176 6  
 2001 APR 17 1545 14.55 19 23.52 155 14.87 4.25 15 5 .06 .5 .6 SEC 1.3X 98 2

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS

2001 APR 17 2010 27.53 19 20.24 155 11.72 9.30 4411 .13 .4 .4 SF3 2.2X 104 5  
 2001 APR 18 0741 59.74 19 20.76 154 51.89 0.01 3810 .18 1.9 .6 SLE # 2.1X 250 14  
 2001 APR 18 0833 54.14 19 26.43 155 29.68 10.81 28 6 .08 .4 1.4 KAO 1.5X 61 10  
 2001 APR 18 1203 35.31 19 20.20 155 7.64 6.23 4010 .10 .5 .8 SF4 1.7X 121 5  
 2001 APR 18 1731 27.61 19 23.62 155 18.06 13.38 24 4 .12 .7 .9 DEPL 1.7X 49 2

2001 APR 18 1906 10.17 19 22.99 155 0.13 8.84 35 4 .12 .9 .4 SF5 1.7X 171 5  
 2001 APR 18 1920 24.40 19 11.11 155 41.67 1.08 4211 .14 .4 .4 LSW 2.4X 93 8  
 2001 APR 18 2217 3.66 19 24.11 154 50.28 38.17 36 4 .11 1.5 1.1 LER 1.5X 264 6  
 2001 APR 18 2258 18.38 19 18.77 155 13.56 9.82 4710 .12 .3 .5 SF2 2.2X 128 7  
 2001 APR 18 2303 45.32 19 18.78 155 13.45 9.45 42 9 .10 .4 .5 SF2 2.0X 127 7

2001 APR 18 2307 9.33 19 17.58 155 13.45 0.23 28 4 .10 .5 .5 SSF 1.1X 161 9  
 2001 APR 19 0837 41.63 19 26.87 155 23.34 12.15 34 7 .12 .4 .6 KAO 1.7X 48 5  
 2001 APR 19 0843 15.05 19 27.06 155 23.28 12.60 32 5 .11 .5 .9 KAO 1.6X 72 5  
 2001 APR 19 0849 12.18 19 26.87 155 23.56 11.80 28 7 .11 .5 1.0 KAO 1.4X 69 5  
 2001 APR 19 1332 46.62 19 25.27 155 14.31 15.37 18 2 .06 .9 .4 DEPL 1.8X 147 1

2001 APR 19 1624 45.17 19 18.94 155 15.03 7.64 35 6 .09 .4 .7 SF1 1.4X 139 5  
 2001 APR 19 2003 30.17 19 23.64 155 27.98 11.97 31 8 .09 .5 1.0 KAO 1.5X 103 9  
 2001 APR 19 2052 19.31 19 27.74 155 29.35 10.87 33 7 .10 .5 .8 KAO 1.4X 79 8  
 2001 APR 19 2135 6.89 19 23.56 155 17.15 2.81 32 7 .11 .3 .2 SSC 2.0X 61 0  
 2001 APR 20 0016 18.92 19 27.12 155 30.35 10.59 34 7 .11 .4 .9 KAO 1.4X 47 6

2001 APR 20 0436 32.91 19 20.97 155 24.39 8.82 23 4 .13 .4 1.3 SWR 1.0X 50 2  
 2001 APR 20 0849 34.88 19 17.12 155 15.07 6.85 31 4 .10 .6 .8 SF1 .9X 188 3  
 2001 APR 20 1010 0.77 19 21.40 155 30.32 9.20 37 5 .10 .4 1.0 KAO 1.5X 53 8  
 2001 APR 20 1145 18.74 19 18.91 155 30.25 1.69 40 7 .15 .3 .8 LSW 1.6X 51 7  
 2001 APR 20 1145 47.83 19 18.64 155 29.86 3.74 4211 .11 .3 1.5 LSW 1.4X 57 7

2001 APR 20 1431 19.27 19 24.15 155 16.36 0.84 25 4 .11 .2 .2 SECL 1.4X 113 1  
 2001 APR 20 1735 27.24 19 22.04 155 34.41 5.79 19 1 .10 .4 1.8 MLO 1.5X 72 6  
 2001 APR 20 1853 55.32 19 30.84 155 23.75 19.17 24 4 .09 .6 .9 DML 1.6X 117 2  
 2001 APR 20 2007 39.29 20 0.49 155 32.77 20.86 24 4 .14 1.1 2.4 KEA 1.6X 182 25  
 2001 APR 20 2057 26.95 19 26.60 155 29.57 11.54 24 3 .14 .5 1.5 KAO 1.2X 46 7

2001 APR 21 0746 56.42 19 18.90 155 28.66 3.14 42 9 .11 .3 1.1 LSW 1.6X 64 7  
 2001 APR 22 0459 55.69 19 8.96 155 31.57 40.82 41 6 .10 .7 1.1 DLSL 1.9X 138 7  
 2001 APR 22 0515 15.47 19 3.31 156 21.51 38.03 35 8 .13 1.2 2.3 DIS 2.4X 301 56  
 2001 APR 22 0613 1.70 19 22.72 155 19.25 1.52 19 3 .11 .4 .8 KAOL 1.5X 77 4  
 2001 APR 22 0751 12.07 19 3.75 156 20.16 39.74 27 8 .09 1.2 2.3 DIS 2.1X 299 54

2001 APR 22 1040 19.43 19 20.73 155 6.54 7.29 4711 .12 .4 .5 SF4 1.8X 137 5  
 2001 APR 22 1900 34.47 19 31.57 155 46.28 13.36 15 1 .14 1.3 .6 KON 1.3U 190 19  
 2001 APR 22 2118 45.50 19 46.74 155 21.61 17.22 4711 .11 .4 1.5 KEA 2.3X 95 10  
 2001 APR 23 0324 36.85 19 12.94 155 16.60 47.02 37 7 .11 1.0 1.0 DEP 1.8X 209 10  
 2001 APR 23 0325 27.34 19 12.89 155 16.38 47.72 3810 .11 .8 .8 DEP 1.7X 210 10

2001 APR 23 0550 10.42 19 20.27 155 4.74 6.66 31 4 .12 .6 .8 SF5 1.4X 167 8  
 2001 APR 23 0733 7.56 19 2.36 156 18.02 34.76 25 4 .13 2.0 2.6 KON 2.1X 329 52  
 2001 APR 23 0942 31.88 19 23.55 155 30.08 15.27 28 2 .09 .5 1.0 DML 1.6X 77 6  
 2001 APR 24 0019 50.98 18 57.35 155 29.80 35.48 31 6 .09 .9 1.1 DLS 2.0X 234 18  
 2001 APR 24 0532 15.06 19 45.24 155 20.15 12.81 26 4 .14 .6 .6 KEA 1.7X 102 13

ORIGIN TIME (HST)												ORIGIN TIME (HST)																											
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN		
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS

2001 APR 24 0643 10.41 19 25.61 155 19.20 6.65 35 7 .10 .4 .7 KAO 1.7X 49 3  
 2001 APR 24 1719 4.13 19 29.97 155 27.37 6.49 28 6 .12 .4 1.3 KAO 1.7X 58 4  
 2001 APR 24 1807 30.11 19 19.80 155 8.67 6.91 26 2 .08 .5 .8 SF4 1.5X 121 5  
 2001 APR 24 1822 42.13 19 31.88 155 28.05 10.77 13 2 .12 1.3 1.5 MLO 1.4X 181 1  
 2001 APR 24 2123 37.67 19 30.01 155 26.69 11.76 14 2 .06 .5 .8 MLO 1.3X 95 4

2001 APR 24 2200 19.85 19 22.14 155 1.84 6.23 22 .12 1.3 .8 SF5 1.2X 201 6  
 2001 APR 25 0607 51.40 19 28.83 155 23.94 12.23 14 2 .13 .7 1.5 KAO 1.4X 87 2  
 2001 APR 25 0955 40.01 19 20.67 155 13.11 6.60 24 2 .09 .5 .8 SF2 1.3X 63 4  
 2001 APR 25 1043 42.40 19 17.62 155 30.06 8.99 11 2 .12 1.1 2.3 LSW 1.3X 110 5  
 2001 APR 25 1737 39.35 19 25.44 155 18.28 6.34 45 5 .11 .3 .5 INTF 4.4U 37 1

2001 APR 25 1739 24.21 19 24.82 155 19.02 5.18 14 2 .09 .5 1.2 INT 1.8X 99 3  
 2001 APR 25 1745 15.95 19 24.78 155 18.16 6.72 19 7 .09 .6 .7 INT 1.4X 82 2  
 2001 APR 25 1745 55.38 19 25.07 155 18.82 5.04 14 2 .12 .6 1.0 INT 1.1X 88 2  
 2001 APR 25 1750 2.82 19 24.71 155 19.18 4.74 18 3 .10 .5 1.2 KAO 1.2X 92 3  
 2001 APR 25 1751 39.50 19 24.71 155 19.10 4.87 18 3 .10 .5 1.1 KAO 1.1X 90 3

2001 APR 25 1757 44.64 19 24.24 155 19.93 1.13 15 2 .09 .3 .9 KAO 1.3X 55 5  
 2001 APR 25 1804 25.47 19 24.63 155 19.44 3.87 16 4 .10 .9 1.6 KAO .9X 94 4  
 2001 APR 25 1819 24.80 19 25.48 155 18.30 6.22 46 7 .11 .3 .4 INTF 4.0U 37 1  
 2001 APR 25 1837 29.64 19 24.66 155 19.67 4.17 11 1 .08 1.2 2.2 KAO .8X 97 4  
 2001 APR 25 1918 8.89 19 30.75 155 23.38 13.71 15 2 .06 .6 .5 DML 1.5X 135 2

2001 APR 25 2201 41.02 19 24.49 155 29.89 14.34 15 1 .10 .6 1.4 DML 1.4X 54 5  
 2001 APR 26 0133 27.93 19 19.89 155 8.68 6.41 34 2 .09 .5 .6 SF4 1.6X 99 5  
 2001 APR 26 0324 57.55 19 25.01 155 19.30 4.51 24 4 .11 .4 1.1 KAO 1.8X 114 3  
 2001 APR 26 0420 29.74 19 24.92 155 16.69 3.87 12 3 .08 .6 .6 SNC 1.4X 148 1  
 2001 APR 26 0423 51.46 19 24.98 155 19.32 4.75 20 5 .08 .4 1.2 KAO 1.5X 79 3

2001 APR 26 0435 36.18 19 14.39 155 33.46 6.25 33 3 .19 .5 1.8 LSW 1.8X 112 6  
 2001 APR 26 0512 19.25 19 26.20 155 19.42 8.16 9 2 .05 1.0 1.5 KAO 1.5X 156 4  
 2001 APR 26 0518 40.43 19 26.36 155 19.60 8.15 35 7 .11 .4 .7 KAO 1.9X 48 4  
 2001 APR 26 0751 52.11 19 27.19 155 54.59 11.49 20 4 .15 1.5 .8 KON 1.7X 261 21  
 2001 APR 26 0914 23.38 19 26.77 155 19.08 10.89 15 5 .10 2.0 1.1 KAOL 1.6X 159 4

2001 APR 26 1101 54.34 19 52.27 155 44.23 10.36 16 2 .11 1.2 .8 HUA 1.8X 239 23  
 2001 APR 26 1407 18.96 19 25.15 155 18.30 4.80 29 5 .10 .3 .6 SNC 1.6X 41 1  
 2001 APR 26 2304 40.60 19 17.41 155 48.00 8.35 17 2 .10 .8 2.4 KON .9X 104 8  
 2001 APR 26 2323 17.92 19 26.34 155 30.31 13.18 19 2 .12 .5 1.1 DML 1.3X 62 5  
 2001 APR 26 2338 29.99 19 24.87 155 19.07 6.78 16 4 .05 .5 1.0 KAO 1.2X 108 3

2001 APR 27 0525 1.67 19 47.39 155 25.71 24.39 22 5 .10 .6 1.1 KEA 1.5X 142 3  
 2001 APR 27 0820 21.71 19 46.89 155 20.98 14.87 23 4 .09 .7 .6 KEA 1.7X 148 11  
 2001 APR 27 0953 52.16 19 25.80 155 17.91 4.71 13 3 .13 1.5 .7 SNC 1.1X 145 1  
 2001 APR 27 1329 15.41 19 19.14 155 8.51 6.90 24 2 .09 .5 .9 SF4 1.4X 125 3  
 2001 APR 27 1707 27.71 19 19.97 155 6.54 6.81 39 9 .12 .5 .8 SF4 1.6X 146 5

2001 APR 27 2150 24.68 19 29.75 156 10.88 42.03 19 4 .12 1.4 2.1 KON X 1.4X 222 28  
 2001 APR 28 0108 29.03 19 20.11 155 7.42 7.64 37 8 .09 .4 .5 SF4 1.7X 127 5  
 2001 APR 28 0842 5.69 19 29.22 154 53.59 0.06 29 2 .13 .3 .6 SLE # 1.8X 104 4  
 2001 APR 28 0851 41.81 19 2.50 154 41.83 6.49 37 3 .13 1.8 1.0 DIS 2.2X 296 49  
 2001 APR 29 0545 53.00 19 20.85 155 30.05 11.44 18 1 .13 .7 1.4 KAO 1.4X 52 9

ORIGIN TIME (HST)												ORIGIN TIME (HST)																											
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN		
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS

2001 APR 29 0956 0.33 19 21.54 155 30.11 4.64 15 1 .09 .4 10.5 KAO - .9X 50 12  
 2001 APR 29 1011 14.13 19 18.40 155 12.62 8.05 33 2 .09 .4 .6 SF2 1.4X 108 3  
 2001 APR 29 1343 41.10 19 19.45 155 13.54 7.01 40 9 .14 .4 .8 SF2 1.5X 67 4  
 2001 APR 29 1740 27.51 19 40.47 156 4.94 8.61 34 1 .15 2.1 .8 HUA 2.6X 279 26  
 2001 APR 29 1755 29.59 19 15.16 155 32.26 1.08 4811 .15 .3 .5 LSW 2.6X 62 13

2001 APR 29 1822 22.51 19 24.73 155 19.81 6.14 14 2 .09 .5 1.9 KAO 1.0X 89 4  
 2001 APR 29 2052 18.67 19 27.41 155 27.85 11.72 22 3 .11 .4 1.0 KAO 1.4X 59 8  
 2001 APR 30 0025 25.66 19 12.29 155 40.80 9.37 35 6 .12 .3 .9 LSW 2.3X 74 11  
 2001 APR 30 0422 55.77 19 12.31 155 38.07 7.58 24 2 .13 .4 1.3 LSW 1.5X 82 15  
 2001 APR 30 1305 49.44 19 18.78 155 47.60 8.56 34 9 .12 .5 .9 KON 1.5X 116 10

2001 APR 30 1536 33.35 19 27.63 155 14.19 29.23 43 8 .10 .5 .8 DEP 1.7X 52 4  
 2001 MAY 1 0613 11.47 19 16.51 155 30.24 8.78 39 9 .20 .4 1.1 LSW 1.6X 61 3  
 2001 MAY 1 0622 49.60 19 22.68 155 30.00 8.63 32 4 .08 .3 .9 KAO 1.4X 48 4  
 2001 MAY 1 1249 11.77 19 24.48 155 19.66 3.01 15 1 .07 .6 1.4 KAO 1.2X 96 4  
 2001 MAY 1 1327 51.08 19 24.73 155 19.31 4.50 27 4 .09 .3 1.0 KAO 1.6X 69 3

2001 MAY 2 0220 17.56 19 29.24 155 28.47 6.88 22 5 .07 .3 1.3 KAO 1.2X 66 5  
 2001 MAY 2 0427 35.01 19 18.75 155 15.67 7.72 43 8 .12 .4 .6 SF1 1.5X 101 5  
 2001 MAY 2 0751 13.29 18 55.12 155 13.59 12.89 34 4 .12 1.5 .9 LOI 1.8X 246 36  
 2001 MAY 2 1054 44.32 19 7.14 155 32.67 47.88 4815 .14 .8 1.0 DLST 2.5X 154 9  
 2001 MAY 2 1055 36.44 19 9.46 155 35.41 50.48 37 7 .13 1.0 1.2 DLST 2.7X 114 13

2001 MAY 2 1100 10.86 19 6.92 155 26.85 45.57 30 3 .12 1.0 1.4 DLST 2.2X 179 5  
 2001 MAY 2 1316 12.83 19 18.27 155 12.94 6.57 32 5 .12 .5 1.2 SF2 1.4X 138 8  
 2001 MAY 2 1619 13.52 19 20.32 155 12.81 9.36 33 5 .08 .5 .5 SF2 1.2X 119 4  
 2001 MAY 2 1701 56.41 19 42.35 156 14.19 5.37 18 3 .11 2.3 2.4 HUA 1.7X 316 41  
 2001 MAY 2 1704 11.68 19 43.88 156 9.06 6.31 18 1 .13 3.1 1.0 HUA 1.9X 308 33

2001 MAY 2 1719 3.90 19 40.50 156 16.62 7.86 15 2 .11 2.0 1.9 HUA 1.4X 319 43  
 2001 MAY 2 1753 37.00 19 30.01 155 25.70 12.38 21 3 .11 .6 .9 MLO 1.3X 84 4  
 2001 MAY 3 0124 44.56 19 6.72 155 24.18 34.96 34 4 .09 .8 1.5 LOI 1.6X 188 8  
 2001 MAY 3 0245 51.64 19 29.16 155 16.07 28.17 4911 .11 .5 .7 DEP 2.3X 55 3  
 2001 MAY 3 0335 2.73 18 51.16 155 12.15 6.49 38 7 .12 1.0 .7 LOI 2.0X 259 44

2001 MAY 3 0550 40.07 19 22.16 155 6.22 0.01 33 6 .11 .3 .2 SME # 1.4X 130 3  
 2001 MAY 3 0810 51.65 19 12.54 155 32.98 4.48 29 2 .14 .5 3.3 LSW 1.5X 128 7  
 2001 MAY 3 0922 38.93 19 20.65 155 8.61 8.16 41 4 .11 .4 .6 SF4 1.9X 102 3  
 2001 MAY 3 1940 8.54 19 50.63 155 56.01 37.73 4710 .12 .7 1.3 HUA 2.4X 158 20  
 2001 MAY 4 1011 21.78 19 18.97 155 15.12 6.98 31 6 .10 .4 .8 SF1 1.4X 101 4

2001 MAY 4 1232 38.87 19 21.16 155 6.04 7.31 38 7 .11 .4 .5 SF4 1.7X 141 5  
 2001 MAY 4 1326 17.98 19 50.81 155 58.26 9.47 23 4 .12 1.0 .7 HUA 2.0X 165 22  
 2001 MAY 4 1757 49.17 19 20.99 155 7.92 9.52 4010 .09 .5 .4 SF4 2.0X 114 4  
 2001 MAY 4 1815 10.36 19 45.45 156 15.26 6.76 12 2 .09 8.010.3 HUA - 1.5U 316 75  
 2001 MAY 5 0028 55.32 19 19.60 155 12.14 8.83 38 5 .12 .4 .5 SF3 1.8X 88 5

2001 MAY 5 0100 20.12 20 4.15 155 56.72 9.78 42 5 .13 .7 .8 KOH 2.5X 151 14  
 2001 MAY 5 0849 28.29 19 12.32 155 28.20 11.08 12 2 .13 1.2 .8 LSW 1.2X 239 6  
 2001 MAY 5 1002 56.73 19 18.40 155 49.59 5.93 21 3 .14 .8 3.4 KON 1.5X 108 6  
 2001 MAY 5 1129 24.83 19 19.91 155 6.24 8.15 36 6 .08 .5 .4 SF4 1.8X 151 6  
 2001 MAY 6 0043 5.70 19 14.87 155 32.86 1.63 4812 .13 .3 .5 LSW 2.4X 110 16

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS	
2001	MAY	6	0044	43.01	19	14.01	155	32.88	5.86	25	3	.15	.4	1.4	LSW	1.4X	71	5	
2001	MAY	6	0054	16.55	17	53.33	153	37.31	0.71	30	2	.15	16.3	5.2	DIS	-2.9X	344217		
2001	MAY	6	0211	9.06	19	20.44	155	11.04	8.49	37	8	.11	.5	.5	SF3	1.8X	108	4	
2001	MAY	6	0213	50.07	19	20.23	155	11.10	7.45	39	8	.08	.4	.5	SF3	1.4X	104	4	
2001	MAY	6	0225	2.98	19	20.63	155	10.74	7.77	35	4	.12	.5	.5	SF3	2.1X	92	3	
2001	MAY	6	0509	37.67	19	19.75	155	8.48	7.33	37	7	.10	.4	.6	SF4	1.5X	104	5	
2001	MAY	6	0742	43.65	19	20.29	155	2.58	39.08	4810	.10	.7	.9	DEP	2.6X	184	8		
2001	MAY	6	1127	5.53	19	23.22	155	17.69	12.28	38	8	.10	.4	.4	INT	1.5X	52	1	
2001	MAY	6	1419	59.80	19	28.15	155	27.39	7.53	37	9	.11	.3	1.0	KAO	1.6X	49	7	
2001	MAY	6	1549	59.49	19	24.87	155	19.02	4.31	25	4	.08	.4	.8	SNC	1.2X	98	3	
2001	MAY	6	1951	28.07	19	19.97	155	12.37	7.52	41	8	.12	.4	.6	SF2	1.7X	79	5	
2001	MAY	7	0022	39.72	19	24.05	155	26.36	10.04	42	8	.10	.3	.6	KAO	1.9X	35	4	
2001	MAY	7	0348	54.37	19	30.98	155	15.25	24.37	30	6	.12	.6	1.1	DEP	1.2X	84	6	
2001	MAY	7	1311	25.23	19	19.47	155	11.39	8.16	30	3	.09	.6	.8	SF3	1.6X	136	6	
2001	MAY	7	1421	53.56	19	21.81	155	13.47	29.63	32	4	.11	.8	1.0	DEP	1.4X	102	2	
2001	MAY	7	1815	28.28	19	48.27	156	6.10	3.00	15	3	.12	2.3	1.0	HUA	1.6X	315	30	
2001	MAY	7	1821	10.59	19	58.16	155	30.09	32.75	24	6	.09	.8	1.6	KEA	1.7X	175	19	
2001	MAY	7	1958	5.40	19	28.23	155	27.84	9.77	28	5	.08	.3	.8	KAO	1.4X	50	7	
2001	MAY	7	2225	1.59	19	32.82	155	14.19	24.67	4210	.11	.5	.9	DEP	1.7X	67	10		
2001	MAY	8	1150	13.33	18	57.79	156	32.34	6.85	30	6	.09	6.8	8.7	DIS	-2.4X	292	84	
2001	MAY	8	1405	49.60	19	20.21	155	8.59	7.18	34	5	.10	.6	.7	SF4	1.4X	101	4	
2001	MAY	8	2326	25.37	19	22.53	155	2.18	8.29	34	4	.13	.7	.4	SF5	1.6X	163	5	
2001	MAY	9	0433	56.80	19	56.43	155	55.27	15.09	50	7	.11	.6	1.1	KOHF	3.0X	152	26	
2001	MAY	9	2006	3.37	19	21.13	155	15.95	15.62	37	5	.13	.6	.3	DEP	1.5X	103	2	
2001	MAY	10	0013	57.67	19	21.78	155	29.90	2.45	18	2	.10	.4	1.8	KAO	1.3X	61	12	
2001	MAY	10	0049	7.80	19	23.86	155	50.31	12.39	17	1	.10	.7	.5	KON	1.5X	127	13	
2001	MAY	10	1219	23.54	19	37.08	155	9.65	27.65	31	7	.12	.7	1.5	KEA	1.6X	148	17	
2001	MAY	10	2005	9.41	19	39.14	155	22.38	13.75	33	6	.12	.4	.5	KEA	1.7X	81	13	
2001	MAY	10	2208	59.58	19	16.36	155	29.45	8.23	27	4	.14	.4	.9	LSW	1.3X	96	3	
2001	MAY	11	0904	49.30	19	12.55	155	42.79	1.35	35	4	.17	.5	.8	LSW	1.6X	85	8	
2001	MAY	11	1449	25.89	19	18.26	155	9.46	35	5	.10	.5	.5	SF2	2.0X	101	2		
2001	MAY	11	1541	52.19	19	18.30	155	13.14	8.33	27	3	.10	.5	.7	SF2	1.6X	94	2	
2001	MAY	11	2207	19.66	19	18.19	155	13.11	7.14	23	2	.11	.6	1.0	SF2	1.1X	98	2	
2001	MAY	12	0120	35.34	19	18.91	155	13.07	8.55	32	3	.09	.4	.5	SF2	1.5X	85	4	
2001	MAY	12	1041	30.75	19	19.73	155	7.55	9.30	4812	.12	.5	.4	.8	SF4	2.6X	127	4	
2001	MAY	13	0104	0.75	19	20.28	155	6.52	5.53	19	1	.11	.5	1.4	SF4	1.5X	150	6	
2001	MAY	13	0632	23.93	19	2.28	155	26.64	40.60	17	1	.07	2.2	3.1	DLS	1.3X	231	23	
2001	MAY	13	0638	42.77	20	19.53	156	27.01	5.10	19	3	.14	1.7	2.4	DIS	1.7U	226	36	
2001	MAY	13	1543	52.40	19	19.36	155	8.72	6.59	34	6	.08	.5	.8	SF4	1.6X	99	4	
2001	MAY	13	2216	18.19	19	18.99	155	29.02	8.86	22	3	.11	.4	1.2	LSW	1.2X	61	7	
2001	MAY	13	2301	15.76	19	25.70	155	15.95	1.83	41	6	.10	.2	.3	SNCF	2.6X	47	2	
2001	MAY	14	1316	57.22	19	28.07	155	24.72	11.92	34	8	.07	.4	.6	KAO	1.7X	60	4	
2001	MAY	14	1614	41.12	19	25.88	155	30.35	14.80	21	4	.12	.5	1.1	DML	1.2X	44	5	
2001	MAY	14	1939	23.22	18	56.49	155	17.06	9.44	25	2	.17	.7	.9	LOI	1.7X	239	35	
2001	MAY	14	2011	32.30	19	12.27	155	32.49	4.43	33	2	.15	.5	2.5	LSW	1.5X	86	7	

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
2001	MAY	14	2034	17.22	19	20.24	155	11.77	7.18	34	6	.09	.5	.6	SP3	1.4X	123	5	
2001	MAY	14	2102	4.96	19	10.46	155	32.78	6.30	22	1	.12	.6	2.1	LSW	1.4X	110	9	
2001	MAY	15	0019	10.60	19	12.42	155	37.34	6.50	36	5	.15	.4	1.3	LSW	1.6X	84	14	
2001	MAY	15	0342	13.91	19	16.32	155	27.15	7.22	32	2	.13	.4	1.0	LSW	1.5X	63	6	
2001	MAY	15	0730	30.87	19	19.80	155	8.26	6.82	32	4	.08	.4	.7	SF4	1.4X	114	5	
2001	MAY	15	1559	4.48	19	24.00	155	22.61	10.92	36	5	.09	.3	.6	KAO	1.4X	41	7	
2001	MAY	15	2324	52.97	19	19.09	155	29.38	8.15	42	9	.13	.3	1.1	KAO	1.5X	38	8	
2001	MAY	16	0144	55.63	19	12.59	155	19.22	28.07	32	4	.13	.8	1.2	DEP	1.6X	171	9	
2001	MAY	16	0216	45.25	19	20.38	155	10.63	9.22	38	6	.12	.6	.5	SF3	1.5X	106	3	
2001	MAY	16	0249	40.41	19	21.11	155	22.95	9.17	29	4	.12	.4	.7	SWR	1.4X	62	2	
2001	MAY	16	0250	11.56	19	20.58	155	22.60	9.90	39	8	.11	.4	.6	SWR	1.6X	69	1	
2001	MAY	16	0418	10.44	19	12.85	155	31.23	9.70	29	3	.15	.5	.9	LSW	1.6X	75	5	
2001	MAY	16	1016	39.27	19	30.25	155	27.33	6.85	12	3	.05	.5	1.1	MLO	1.2X	128	3	
2001	MAY	16	1300	47.62	19	21.84	155	6.71	7.81	28	5	.10	.4	.6	SF4	1.4X	129	3	
2001	MAY	16	1319	51.46	19	17.21	155	29.01	6.90	26	4	.09	.4	1.0	LSW	1.4X	122	4	
2001	MAY	16	1530	32.81	19	15.42	155	26.60	7.30	23	2	.11	.5	.9	LSW	1.5X	139	5	
2001	MAY	16	2208	47.84	19	24.85	155	38.95	3.16	20	2	.10	.7	.6	MLO	1.5X	189	2	
2001	MAY	17	0130	39.80	19	28.83	155	25.05	8.69	21	4	.12	.6	1.4	KAO	1.3X	86	4	
2001	MAY	17	0631	34.05	19	36.85	156	7.12	39.50	20	3	.13	.2	2.1	KON	2.0X	291	25	
2001	MAY	17	0717	39.54	19	19.59	155	9.13	8.33	37	5	.09	.5	.6	SF3	1.4X	88	5	
2001	MAY	17	1128	5.77	19	19.74	155	13.16	7.69	35	6	.10	.4	.7	SF2	1.4X	128	5	
2001	MAY	17	2107	1.77	19	21.83	155	30.40	8.60	29	3	.08	.4	1.9	KAO	1.2X	53	12	
2001	MAY	17	2120	10.74	19	15.32	155	24.44	36.01	43	9	.11	.7	1.0	DEP	1.7X	76	2	
2001	MAY	18	0401	17.15	19	15.35	155	32.07	8.88	22	4	.17	.8	1.1	LSW	1.2X	107	3	
2001	MAY	18	0644	19.86	19	17.56	155	15.53	5.89	33	3	.10	.4	1.0	SF1	1.4X	144	4	
2001	MAY	18	1059	39.28	19	51.67	155	23.74	23.93	38	9	.11	.6	1.5	KEA	2.0X	113	6	
2001	MAY	18	1529	16.97	19	21.01	155	5.09	6.38	39	6</								

ORIGIN TIME (HST)												LAT	N	LON	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKs	MAG	RD	GAP	DS						

2001 MAY 20 2043 43.98 19 25.64 155 16.70 11.59 22 4 .09 .9 .8 INTL 1.2X 160 1  
 2001 MAY 20 2100 9.90 19 25.30 155 16.97 13.94 21 4 .11 1.0 .8 DEPL 1.1X 149 1  
 2001 MAY 20 2138 18.55 19 25.14 155 17.40 9.86 17 .14 1.1 1.5 INTL .7X 135 1  
 2001 MAY 20 2157 29.32 19 23.93 155 16.85 13.11 19 3 .12 .9 .9 DEPL 1.0X 80 0  
 2001 MAY 20 2205 5.36 19 25.66 155 16.59 12.95 20 3 .06 .9 .4 INTL 1.0X 139 2

2001 MAY 20 2223 23.55 19 25.07 155 16.83 12.36 26 3 .09 .7 .6 INTL .9X 139 0  
 2001 MAY 20 2229 25.31 19 25.18 155 16.61 13.16 26 3 .10 .7 .5 DEPL 1.2X 127 1  
 2001 MAY 20 2318 44.56 19 27.39 155 13.45 18.32 20 3 .11 1.5 .7 DEPL 1.4X 232 5  
 2001 MAY 20 2322 44.76 19 25.09 155 15.99 14.18 20 4 .07 1.0 .5 DEPL 1.0X 159 2  
 2001 MAY 20 2328 41.15 19 25.58 155 16.59 12.67 19 2 .08 .9 .8 INTL 1.2X 159 1

2001 MAY 20 2332 3.78 19 24.77 155 16.87 11.70 18 3 .09 .9 .9 INTL .9X 135 0  
 2001 MAY 20 2342 36.02 19 23.72 155 15.75 16.03 14 3 .07 1.3 .8 DEPL .9X 133 2  
 2001 MAY 21 0223 49.11 19 25.19 155 17.04 11.39 18 1 .06 .9 1.1 INT 1.3X 146 1  
 2001 MAY 21 0305 46.30 19 19.53 155 6.74 7.44 26 4 .08 .5 .7 SF4 1.2X 181 5  
 2001 MAY 21 0354 2.69 19 18.71 155 15.16 5.83 22 1 .11 .5 1.4 SF1 1.1X 107 4

2001 MAY 21 0442 53.98 19 20.35 155 11.45 8.84 30 3 .08 .5 .5 SF3 1.4X 78 4  
 2001 MAY 21 0450 20.81 19 15.96 155 31.96 5.93 23 2 .13 .5 1.1 LSW .9X 88 4  
 2001 MAY 21 0606 41.95 19 20.39 155 11.73 8.76 32 3 .08 .5 .6 SF3 1.4X 77 5  
 2001 MAY 21 1510 23.71 19 21.88 155 28.04 9.50 38 6 .12 .4 .8 KAO 1.6X 44 1  
 2001 MAY 21 1615 35.92 19 21.89 155 7.86 47.53 30 4 .10 1.3 1.4 DEP 1.5X 127 3

2001 MAY 21 2339 4.15 19 55.56 155 39.55 11.57 15 3 .07 1.5 .6 KOH 1.4X 240 26  
 2001 MAY 21 2354 40.43 19 10.97 155 28.30 34.44 35 5 .08 .6 1.4 DLS 1.5X 152 8  
 2001 MAY 22 0144 4.15 19 11.99 155 27.42 6.92 37 5 .14 .4 .9 LSW 1.6X 117 5  
 2001 MAY 22 0145 2.16 19 12.01 155 27.17 3.94 15 .15 .8 3.0 LSW 1.2X 122 5  
 2001 MAY 22 0310 53.29 19 28.97 155 24.21 11.35 23 3 .13 .5 .8 KAO 1.3X 68 2

2001 MAY 22 0352 13.02 19 51.83 155 30.51 13.55 22 3 .10 1.1 .6 KEA 1.8X 199 18  
 2001 MAY 22 0359 7.96 19 21.21 155 30.34 14.62 15 1 .09 .7 1.6 DML 1.2X 94 8  
 2001 MAY 22 0543 27.12 19 22.53 155 30.28 25.16 14 3 .09 1.3 1.2 DML 1.3X 187 14  
 2001 MAY 22 0656 32.85 19 24.26 155 25.29 10.04 13 1 .11 .6 2.0 KAO 1.0X 63 8  
 2001 MAY 22 1107 32.20 19 13.82 155 20.18 43.42 22 5 .10 1.2 1.3 DEP 1.6X 187 7

2001 MAY 23 0137 22.18 19 6.97 155 28.29 31.40 19 2 .09 1.3 2.4 DLS 1.4X 239 5  
 2001 MAY 23 0219 57.76 19 19.64 155 7.09 8.08 27 1 .09 .5 .7 SF4 1.4X 145 4  
 2001 MAY 23 0416 3.84 19 25.48 155 20.12 8.42 17 3 .09 .5 1.3 KAO 1.1X 126 4  
 2001 MAY 23 1528 23.81 19 20.26 155 8.76 6.94 17 2 .13 .6 1.3 SF4 1.1X 103 4  
 2001 MAY 23 1632 50.50 19 29.42 155 26.31 7.69 10 1 .13 .9 2.2 KAO 1.1X 120 5

2001 MAY 23 1800 29.83 19 18.68 155 13.11 9.45 34 3 .08 .5 .6 SF2 1.7X 132 7  
 2001 MAY 23 1924 53.83 19 23.98 155 15.76 3.19 34 5 .11 .3 .3 SEC 2.2X 54 1  
 2001 MAY 24 0128 12.55 19 28.74 155 25.77 11.06 21 4 .11 .4 .8 KAO 1.4X 54 5  
 2001 MAY 24 0234 59.24 19 27.72 155 25.55 8.95 38 7 .11 .3 .9 KAO 1.8X 50 5  
 2001 MAY 24 0251 42.67 19 27.58 155 25.64 9.06 4911 .12 .3 .6 KAO 2.6X 36 6

2001 MAY 24 0420 6.12 19 17.66 155 22.37 34.99 22 3 .12 .9 2.0 DEP 1.5X 112 5  
 2001 MAY 24 0528 56.82 19 27.80 155 25.48 7.01 12 2 .12 .5 1.8 KAO 1.0X 84 5  
 2001 MAY 24 1021 42.34 19 23.77 155 14.55 29.49 21 2 .11 1.0 1.3 DEP 1.6X 130 2  
 2001 MAY 24 1212 19.79 19 44.30 155 27.06 19.13 11 3 .11 1.3 1.8 KEA 1.4X 183 15  
 2001 MAY 24 1616 45.47 19 12.28 155 27.44 0.60 22 5 .12 .3 .3 LSW 1.3X 115 5

ORIGIN TIME (HST)												LAT	N	LON	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKs	MAG	RD	GAP	DS						

2001 MAY 24 1626 12.06 19 12.71 155 28.46 4.80 41 9 .10 .3 1.1 LSWF 2.6X 93 6  
 2001 MAY 24 1928 6.51 19 20.98 155 12.72 8.21 28 2 .13 .6 .8 SF2 1.4X 111 3  
 2001 MAY 25 0614 23.10 19 22.30 155 26.88 11.05 28 4 .12 .4 1.0 KAO 1.6X 46 1  
 2001 MAY 25 0746 31.95 19 26.68 155 23.62 10.62 29 4 .11 .4 1.0 KAO 1.4X 49 6  
 2001 MAY 25 0751 43.51 19 22.31 155 30.03 13.96 15 1 .08 .6 1.7 DML 1.3X 95 7

2001 MAY 25 1300 18.52 19 20.93 155 9.93 7.25 23 2 .09 .6 .7 SF3 1.5X 102 2  
 2001 MAY 25 1301 54.80 19 34.86 155 52.00 11.83 13 2 .14 2.6 .8 KON 1.3U 307 30  
 2001 MAY 26 0134 33.74 19 55.60 155 29.62 11.53 14 4 .13 1.0 .6 KEA 1.4X 230 16  
 2001 MAY 26 0437 36.01 19 22.92 155 32.97 6.54 13 1 .08 .6 1.6 MLO 1.2X 98 4  
 2001 MAY 26 0645 5.96 19 19.68 155 12.47 7.72 32 5 .10 .5 .7 SF2 1.4X 127 6

2001 MAY 26 1114 21.01 19 15.25 155 20.14 31.35 20 2 .12 1.4 2.5 DEP 1.4X 151 6  
 2001 MAY 26 1452 43.96 19 19.72 155 6.99 9.22 42 7 .11 .6 .5 SF4 2.3X 140 5  
 2001 MAY 26 1505 38.27 19 21.18 155 7.04 9.90 38 5 .10 .8 .4 SF4 2.3X 181 4  
 2001 MAY 26 1508 38.21 19 19.64 155 7.03 8.75 38 7 .09 .6 .5 SF4 2.2X 139 5  
 2001 MAY 26 1547 53.94 19 12.55 155 15.09 49.04 17 2 .11 1.9 2.2 DEP 1.4X 282 12

2001 MAY 26 1617 1.62 19 13.05 155 14.22 47.73 14 1 .08 1.7 2.8 DEP 1.4X 287 12  
 2001 MAY 26 1720 56.02 19 50.76 155 32.00 21.49 44 7 .09 .5 1.1 KEA 2.0X 115 11  
 2001 MAY 26 2047 19.50 19 19.51 155 6.88 7.09 26 2 .08 .6 .8 SF4 1.3X 145 4  
 2001 MAY 26 2345 35.56 19 54.80 155 20.91 10.46 16 1 .06 1.3 .4 KEA 1.6U 239 3  
 2001 MAY 27 0421 58.13 19 12.20 155 28.96 7.72 14 .14 .7 .9 LSW 1.3X 101 5

2001 MAY 27 0459 17.84 19 28.84 155 26.80 9.06 10 1 .10 .6 2.1 KAO 1.4X 87 6  
 2001 MAY 27 1120 52.13 19 19.72 155 11.30 7.59 28 2 .07 .5 .8 SF3 1.4X 120 5  
 2001 MAY 27 2207 45.99 19 4.14 155 22.03 36.65 4812 .10 .8 1.0 LOI 2.0X 202 14  
 2001 MAY 27 2209 19.35 19 4.75 155 22.16 36.24 5213 .09 .8 .9 LOI 2.7X 199 13  
 2001 MAY 27 2215 47.66 19 6.99 155 21.82 30.47 4411 .10 .9 1.0 LOI 2.0X 240 12

2001 MAY 28 0007 56.21 19 5.49 155 22.37 35.00 15 2 .10 1.6 2.3 LOI 1.2X 299 17  
 2001 MAY 28 0042 19.59 19 12.46 155 25.32 22.60 11 .06 5.0 5.3 DLS .9X 251 4  
 2001 MAY 28 0505 28.42 19 41.65 156 23.66 5.52 16 5 .14 1.5 1.2 DIS 1.0U 228 58  
 2001 MAY 28 0512 49.06 19 54.57 155 20.70 10.14 19 1 .08 1.3 .4 KEA 1.4X 239 2  
 2001 MAY 28 0608 53.71 19 24.60 155 49.66 14.70 15 3 .10 1.3 .5 KON .9X 192 18

2001 MAY 28 0724 45.76 19 55.58 155 20.73 10.56 21 3 .11 1.3 .5 KEA 1.6X 243 4  
 2001 MAY 28 0751 2.56 19 55.85 155 30.81 22.58 17 3 .10 1.1 2.2 KEA 1.3X 155 18  
 2001 MAY 28 1041 40.35 19 25.03 155 38.98 3.31 23 3 .10 .7 .6 MLO 1.8X 190 2  
 2001 MAY 28 1407 8.80 19 26.51 155 29.58 10.64 40 9 .10 .3 .8 KAO 1.6X 43 8  
 2001 MAY 28 1554 18.92 19 20.82 155 8.10 9.73 27 4 .08 .4 .5 SF4 1.5X 113 4

2001 MAY 28 1649 24.43 19 15.98 155 28.25 10.06 24 2 .13 .5 .7 LSW 1.3X 68 4  
 2001 MAY 29 0521 20.01 19 21.47 155 4.67 7.11 37 6 .12 .5 .5 SF5 1.8X 154 5  
 2001 MAY 29 1039 48.67 19 12.92 155 7.53 47.67 25 3 .10 1.5 1.8 DEP 1.4X 261 8  
 2001 MAY 29 1448 23.08 20 31.56 155 48.23 6.78 23 2 .13 1.5 1.2 DIS 2.3X 214 44  
 2001 MAY 29 1632 53.72 19 23.01 155 4.36 9.06 48 8 .11 .6 .4 SF5 3.0X 142 3

2001 MAY 29 1748 33.26 19 19.18 155 50.32 10.25 24 5 .10 .8 .4 KON 1.5X 149 7  
 2001 MAY 29 2350 39.64 19 21.72 155 29.44 10.22 24 4 .11 .4 1.2 KAO 1.0X 46 9  
 2001 MAY 29 2351 28.17 19 23.55 155 30.31 12.41 21 3 .10 .5 1.0 KAO 1.4X 48 5  
 2001 MAY 30 0054 4.54 19 55.35 155 20.28 10.98 33 3 .12 1.4 .4 KEA 1.9X 242 4  
 2001 MAY 30 0209 45.20 19 27.09 155 28.74 13.49 20 3 .09 .4 1.0 DML 1.1X 51 8

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	S	SEC	KM	KM	REMKs	MAG	RD	GAP	DS			
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM																	

2001 MAY 30 0549 17.86 19 20.24 155 7.94 7.09 30 4 .10 .5 .6 SF4 1.4X 116 5  
 2001 MAY 30 0638 12.81 19 20.11 155 0.04 0.03 35 7 .19 1.0 .4 SSF # 2.2X 202 10  
 2001 MAY 30 0658 32.91 19 54.17 155 55.59 41.47 28 5 .08 1.2 1.1 HUA 1.9X 276 26  
 2001 MAY 30 1008 57.98 19 55.22 155 20.28 10.46 23 4 .12 1.4 .5 KEA 1.5X 242 3  
 2001 MAY 30 1138 29.24 19 36.06 155 57.06 13.92 29 3 .13 2.5 1.6 KON 2.2X 243 15

2001 MAY 30 1805 23.13 19 25.77 155 27.92 12.90 18 2 .09 .5 1.6 KAO 1.2X 58 9  
 2001 MAY 30 1852 40.58 20 3.44 155 13.26 22.46 26 5 .10 1.4 1.9 KEA 1.9X 294 23  
 2001 MAY 30 1902 47.67 19 4.11 155 21.88 37.58 37 6 .09 .9 1.3 LOI 1.7X 207 19  
 2001 MAY 30 2137 14.29 19 25.06 155 31.29 11.16 24 3 .09 .4 .9 KAO 1.1X 65 9  
 2001 MAY 31 0118 54.28 19 19.06 155 15.55 8.64 32 4 .09 .5 .7 SF1 1.5X 137 6

2001 MAY 31 0124 5.40 19 58.17 155 21.22 10.81 38 5 .12 .7 .5 KEA 2.4X 181 9  
 2001 MAY 31 0431 21.53 19 27.73 155 51.83 12.91 26 2 .13 1.2 .4 KON 2.1X 183 22  
 2001 MAY 31 0802 0.36 19 21.28 155 15.53 26.64 5110 12 .5 .6 DEPF 3.1X 67 2  
 2001 MAY 31 0834 50.68 19 21.76 155 15.51 25.08 28 3 .08 .8 1.0 DEP 1.4X 61 1  
 2001 MAY 31 0856 15.84 19 21.67 155 15.49 25.00 40 8 .10 .7 .7 DEP 1.7X 98 2

2001 MAY 31 0856 49.58 19 21.52 155 15.32 24.87 26 2 .07 .8 1.0 DEP 1.3X 102 2  
 2001 MAY 31 1022 43.08 19 20.16 155 12.29 8.31 33 5 .10 .5 .6 SF3 1.3X 119 5  
 2001 MAY 31 1515 24.04 19 0.65 155 20.34 32.73 32 4 .11 1.1 1.7 LOI 1.8X 224 26  
 2001 MAY 31 2126 37.82 19 5.07 155 22.13 34.36 4710 10 .8 1.1 LOIF 3.3X 199 17  
 2001 MAY 31 2146 1.20 19 5.03 155 22.06 33.96 32 2 .11 1.3 1.3 LOI 1.8X 233 17

2001 MAY 31 2155 9.18 19 12.16 155 32.36 8.18 23 3 .11 .6 .8 LSW 1.3X 184 7  
 2001 MAY 31 2302 22.56 19 4.47 155 21.81 36.64 36 4 .09 .9 1.6 LOI 1.8X 202 19  
 2001 JUN 1 0042 50.41 19 4.31 155 21.85 38.97 30 5 .08 .9 1.6 LOI 1.6X 208 19  
 2001 JUN 1 0152 1.94 19 3.93 155 21.85 39.18 25 2 .07 1.3 1.9 LOI 1.5X 240 20  
 2001 JUN 1 0241 52.25 19 3.78 155 21.95 38.15 23 4 .08 1.3 1.9 LOI 1.5X 270 20

2001 JUN 1 1504 0.03 19 5.41 155 22.55 34.59 22 3 .07 .9 1.8 LOI 1.4X 253 17  
 2001 JUN 1 1528 22.18 19 19.79 155 7.28 8.91 36 6 .08 .5 .4 SF4 2.3X 132 5  
 2001 JUN 1 1550 17.22 19 4.40 155 22.28 36.74 29 3 .08 .9 2.0 LOI 1.5X 205 19  
 2001 JUN 1 2016 42.29 19 15.64 155 27.14 10.76 44 7 .13 .4 .4 LSWF 3.8U 138 5  
 2001 JUN 1 2130 36.40 19 23.26 155 26.90 9.73 20 3 .10 .4 .8 KAO 1.2X 55 8

2001 JUN 2 0352 33.57 18 34.59 156 12.24 6.88 37 7 .11 7.4 9.4 DISF- 2.9X 324 72  
 2001 JUN 2 0417 9.16 19 3.87 155 21.88 37.84 31 5 .10 1.0 1.4 LOI 1.5X 208 20  
 2001 JUN 2 0904 48.90 19 15.25 155 2.13 42.02 39 3 .11 1.1 1.2 DEP 2.1X 226 11  
 2001 JUN 2 1335 55.85 19 21.37 155 29.90 7.88 4310 .11 .3 1.0 KAO 1.8X 44 12  
 2001 JUN 2 1802 5.62 18 55.50 155 16.76 33.12 29 .13 2.1 3.7 LOI 2.0X 242 37

2001 JUN 3 0039 22.46 19 48.39 156 9.94 33.65 46 6 .13 .9 2.0 HUA 2.8X 196 37  
 2001 JUN 3 0516 33.55 19 58.23 155 22.35 11.15 18 5 .11 .8 .5 KEA 1.7X 196 9  
 2001 JUN 3 1124 53.16 19 20.53 155 11.69 9.64 39 4 .12 .5 .5 SF3 2.2X 101 4  
 2001 JUN 3 1213 36.73 19 19.50 155 7.02 8.70 37 7 .09 .5 .4 SF4 1.9X 141 4  
 2001 JUN 3 1358 43.51 19 28.15 155 24.75 10.64 30 7 .10 .4 .9 KAO 1.6X 59 4

2001 JUN 3 1510 3.80 19 34.13 155 54.98 31.27 32 6 .11 .7 1.2 KON 1.9X 158 9  
 2001 JUN 3 1901 34.07 19 22.40 155 30.15 10.04 21 4 .07 .4 1.5 KAO 1.3X 50 13  
 2001 JUN 4 0032 27.13 19 13.14 155 22.68 34.62 40 9 .11 .6 .9 DEP 1.7X 157 3  
 2001 JUN 4 0545 15.49 19 5.44 155 22.28 33.54 35 6 .09 1.0 1.1 LOI 1.5X 200 17  
 2001 JUN 4 0621 44.08 19 12.82 155 41.91 1.54 30 5 .17 .5 .9 LSW 1.5X 88 10

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	S	SEC	KM	KM	REMKs	MAG	RD	GAP	DS		
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM																

2001 JUN 4 0632 39.42 19 22.48 155 30.01 9.26 25 3 .07 .3 1.4 KAO 1.4X 48 12  
 2001 JUN 4 1533 2.64 19 26.56 155 22.34 11.47 32 6 .10 .3 .6 KAO 1.4X 64 3  
 2001 JUN 4 1841 28.89 19 1.72 155 25.49 40.13 34 6 .09 1.0 1.2 DLS 1.5X 211 23  
 2001 JUN 5 0032 53.88 19 13.72 155 22.99 36.53 4010 .11 .7 1.0 DEP 1.9X 153 2  
 2001 JUN 5 0155 39.69 19 30.49 155 18.32 23.81 4814 .11 .4 .7 DEP 2.3X 58 6

2001 JUN 5 0335 52.73 20 52.24 155 38.10 4.27 40 7 .15 2.4 2.3 DIS 2.9X 253 67  
 2001 JUN 5 1525 31.34 19 19.56 155 14.83 7.75 37 7 .13 .5 .7 SF1 1.5X 170 5  
 2001 JUN 5 1610 40.50 19 20.38 155 11.45 9.80 33 5 .11 .5 .6 SF3 1.3X 119 4  
 2001 JUN 5 1721 10.71 19 18.60 155 16.24 7.43 36 5 .11 .4 .6 SF1 1.4X 141 3  
 2001 JUN 6 0027 54.85 19 22.19 155 1.96 7.87 37 8 .11 .7 .5 SF5 1.5X 168 5

2001 JUN 6 0720 6.02 19 30.68 155 27.69 5.34 22 6 .08 .3 1.0 MLO 1.3X 101 2  
 2001 JUN 6 0833 23.78 20 4.35 155 45.68 36.11 23 4 .09 1.0 1.2 KOH 1.9X 137 6  
 2001 JUN 6 1029 24.54 19 4.62 155 21.98 36.55 27 2 .08 .9 2.0 LOI 1.5X 201 18  
 2001 JUN 6 1126 36.12 19 34.30 155 55.39 11.22 19 3 .13 1.3 .6 KON 1.2X 218 9  
 2001 JUN 6 1217 16.98 19 25.21 155 19.49 5.77 18 3 .08 .5 1.2 KAO 1.2X 108 3

2001 JUN 6 1431 29.74 19 17.18 155 20.88 8.21 20 1 .08 .6 1.0 SWR 1.3X 158 4  
 2001 JUN 6 1450 37.88 19 19.00 155 13.08 9.34 32 3 .12 .6 .8 SF2 1.6X 138 7  
 2001 JUN 6 1513 44.93 19 25.30 155 28.10 10.41 19 2 .13 .6 1.5 KAO 1.1X 92 9  
 2001 JUN 6 1657 7.61 19 4.66 155 22.16 35.56 47 9 .10 .9 1.3 LOI 2.5X 200 18  
 2001 JUN 6 1807 16.97 19 20.15 155 10.66 9.30 35 4 .09 .5 .6 SF3 1.7X 109 4

2001 JUN 6 1807 27.17 19 19.64 155 10.77 8.09 15 3 .05 .6 1.4 SF3 1.6X 128 5  
 2001 JUN 6 2138 43.37 19 22.39 155 15.36 25.46 36 8 .09 .7 .6 DEP 1.7X 91 1  
 2001 JUN 7 0134 48.43 19 5.89 155 29.59 29.87 44 9 .08 .6 1.2 DLS 2.2X 175 17  
 2001 JUN 7 0141 30.57 19 25.62 155 15.68 1.74 9 2 .13 .6 .8 SNCL 1.6X 185 3  
 2001 JUN 7 0825 2.72 19 19.34 155 11.54 7.46 23 3 .08 .5 1.1 SF3 1.2X 128 6

2001 JUN 7 0930 34.65 19 7.89 155 28.57 42.34 29 9 .08 1.0 1.1 DLS 1.8X 221 14  
 2001 JUN 8 0437 21.25 19 19.64 155 8.77 7.23 36 6 .09 .4 .6 SF4 1.3X 97 4  
 2001 JUN 8 0745 50.89 19 12.52 155 42.82 0.54 4311 .15 .4 .3 LSW 2.4X 84 8  
 2001 JUN 8 0910 3.55 19 19.24 155 7.91 7.50 29 4 .12 .6 .8 SF4 1.4X 127 3  
 2001 JUN 9 0012 19.33 19 9.59 155 19.14 48.86 23 4 .11 1.1 1.9 LOI 1.6X 189 12

2001 JUN 9 0411 21.89 19 16.43 155 30.22 9.43 30 1 .09 .4 .6 LSW 1.3X 69 3  
 2001 JUN 9 0550 28.04 19 22.24 155 30.07 12.70 23 6 .10 .4 1.0 KAO 1.4X 49 7  
 2001 JUN 9 0638 51.22 19 22.90 155 14.52 3.26 32 6 .10 .3 .3 SEC 1.5X 88 3  
 2001 JUN 9 0831 14.27 19 46.38 155 2.75 41.85 47 7 .11 .8 1.2 HIL 2.2X 206 8  
 2001 JUN 9 1005 23.21 19 25.21 155 17.11 13.24 13 4 .10 1.6 1.3 DEPL 1.6X 169 1

2001 JUN 9 1349 58.92 19 18.87 155 14.86 6.50 25 2 .12 .7 .9 SF1 1.4X 140 5  
 2001 JUN 9 1904 59.57 19 22.83 155 20.58 32.84 5010 .12 .5 .8 DML 2.7X 45 6  
 2001 JUN 10 0024 55.49 19 19.78 155 7.92 9.06 4311 .10 .5 .4 SF4 2.3X 124 4  
 2001 JUN 10 0038 39.56 19 25.15 155 16.51 1.38 12 2 .10 .3 .3 SNCL 1.6X 156 1  
 2001 JUN 10 0309 12.40 19 25.62 155 17.09 3.62 12 2 .08 .9 .3 SNCL 1.7X 163 1

2001 JUN 10 0850 45.20 19 24.56 155 17.97 8.76 15 2 .10 .8 1.5 INTL 1.8X 152 5  
 2001 JUN 10 1439 37.35 19 12.47 155 16.64 51.53 37 5 .11 .9 1.2 DEP 1.8X 180 11  
 2001 JUN 10 1815 26.03 19 25.51 155 30.52 11.70 31 3 .09 .4 .9 KAO 1.6X 45 9  
 2001 JUN 10 1940 21.57 19 20.93 155 5.74 9.87 36 5 .10 .7 .4 SF4 2.2X 147 6  
 2001 JUN 10 2156 7.47 19 25.74 155 15.86 2.54 16 3 .12 .4 .5 SNCL 1.7X 167 3

ORIGIN TIME (HST)												ORIGIN TIME (HST)																									
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS
2001	JUN	11	2230	2.46	20	38.17	156	4.84	10.19	32	4	.15	1.3	2.5	DIS	2.3X	199	20	2001	JUN	18	1627	50.80	19	22.28	154	58.87	9.56	25	3	.09	1.0	.6	LER	1.8X	219	5
2001	JUN	11	2343	1.50	19	26.27	155	29.79	13.25	21	3	.12	.5	.8	DML	1.4X	42	6	2001	JUN	18	2008	42.80	19	47.79	155	32.91	24.49	21	4	.09	.8	1.5	KEA	2.0X	175	10
2001	JUN	12	0212	48.43	19	23.77	155	49.78	13.41	30	6	.12	.5	.4	KON	1.9X	121	14	2001	JUN	19	1558	13.61	19	23.09	155	15.39	31.94	47	9	.11	.5	.8	DEP	2.9X	82	2
2001	JUN	12	0629	33.53	20	15.96	155	41.20	40.29	34	3	.11	1.1	2.1	KOH	2.3X	185	55	2001	JUN	20	0303	2.09	19	19.20	155	13.37	9.20	35	3	.12	.6	.7	SF2	1.6X	136	6
2001	JUN	12	0634	27.01	19	20.07	155	10.06	6.89	27	3	.08	.5	.8	SF3	1.2X	113	4	2001	JUN	20	0452	57.75	19	28.01	155	26.74	9.48	28	8	.10	.4	.9	KAO	1.3X	54	7
2001	JUN	12	0955	46.49	19	22.66	155	30.11	10.62	30	4	.08	.3	1.1	KAO	1.4X	48	13	2001	JUN	20	0649	56.33	19	27.81	155	15.84	26.13	34	6	.11	.6	.9	DEP	1.5X	73	1
2001	JUN	12	1031	55.70	19	23.71	155	21.71	10.57	36	7	.10	.4	.6	KAO	1.6X	41	7	2001	JUN	20	0714	58.45	19	21.44	155	30.43	12.15	25	1	.11	.7	1.3	KAO	1.1X	55	5
2001	JUN	12	2212	14.21	19	19.84	155	13.09	7.77	28	4	.11	.6	.7	SF2	1.2X	187	5	2001	JUN	20	1358	30.50	19	36.94	155	18.11	12.31	16	4	.10	.9	.6	KEA	1.1X	179	16
2001	JUN	12	2227	44.88	19	49.09	155	51.26	12.23	4710	.11	.5	.7	HUA	2.3X	151	15	2001	JUN	20	1438	17.78	19	18.36	155	14.65	4.61	21	2	.13	.9	3.0	SSF	1.3X	196	6	
2001	JUN	13	0053	19.90	19	25.25	155	18.36	7.76	25	5	.13	.5	.8	INTL	1.6X	120	1	2001	JUN	20	1710	54.03	19	12.70	155	24.67	45.94	17	3	.11	1.4	1.6	DEP	1.4X	219	3
2001	JUN	13	0919	53.32	19	20.10	155	13.18	4.76	27	4	.11	.5	1.6	SSF	1.2X	130	5	2001	JUN	20	1910	22.46	19	45.83	155	20.16	13.49	20	7	.13	.9	.5	KEA	1.6X	185	13
2001	JUN	13	1451	27.43	19	25.45	155	19.89	5.02	38	7	.11	.3	1.1	KAO	1.8X	46	4	2001	JUN	20	2045	8.10	19	45.80	155	20.04	13.83	18	4	.10	.8	.4	KEA	1.4X	168	13
2001	JUN	13	2121	24.83	19	29.20	155	27.44	11.34	32	6	.10	.4	.7	KAO	1.3X	48	5	2001	JUN	21	1002	0.25	19	28.89	155	26.55	9.39	29	6	.12	.4	.9	KAO	1.6X	61	6
2001	JUN	14	0252	43.38	19	12.12	155	41.07	5.41	30	3	.15	.6	1.6	LSW	1.6X	156	10	2001	JUN	21	1642	48.08	19	20.28	155	11.48	9.09	31	2	.12	.6	.8	SF3	1.5X	113	4
2001	JUN	14	0421	26.15	19	25.21	155	15.55	12.30	17	2	.14	1.4	1.1	INTL	1.7X	163	2	2001	JUN	21	2302	26.59	19	25.24	155	28.30	9.63	37	5	.09	.3	.7	KAO	1.7X	43	5
2001	JUN	14	0443	35.15	20	17.38	155	40.03	41.46	38	3	.11	1.1	1.3	KOH	1.8X	189	21	2001	JUN	22	0147	33.66	19	20.67	155	13.20	9.12	40	7	.13	.4	.6	SF2	1.9X	107	4
2001	JUN	14	0833	32.76	19	22.46	155	2.49	6.19	28	3	.12	.6	.7	SF5	1.5X	161	4	2001	JUN	22	0948	13.93	19	29.46	155	27.29	5.97	21	4	.08	.4	1.7	KAO	1.6X	92	5
2001	JUN	14	0924	31.25	19	55.13	155	31.39	32.86	27	4	.13	.9	1.8	KEA	1.6X	148	19	2001	JUN	22	1110	44.20	19	22.39	155	15.20	12.17	37	9	.10	.4	.5	INT	1.7X	91	4
2001	JUN	14	1822	23.20	19	24.83	155	16.71	9.41	24	5	.11	.7	.6	INTL	1.6X	138	1	2001	JUN	22	1850	59.15	19	15.71	155	31.75	8.92	35	4	.15	.5	.9	LSW	2.1X	93	3
2001	JUN	14	2021	4.26	19	24.51	155	26.93	11.12	37	8	.10	.4	.7	KAO	1.3X	34	4	2001	JUN	22	2137	49.48	19	26.09	155	24.07	9.36	23	4	.08	.3	.9	KAO	1.4X	53	7
2001	JUN	14	2027	2.35	19	3.93	155	21.58	37.07	38	8	.10	1.0	1.2	LOI	1.7X	204	20	2001	JUN	23	0238	18.10	19	22.71	155	1.75	8.03	28	1	.13	1.0	.6	SF5	1.4X	164	5
2001	JUN	14	2135	27.67	19	3.37	155	21.23	37.99	32	4	.11	1.1	1.6	LOI	1.5X	207	21	2001	JUN	23	0643	10.79	19	19.79	155	10.28	7.88	27	3	.10	.6	.8	SF3	1.4X	111	4
2001	JUN	15	0155	53.16	19	3.63	155	21.83	38.21	4511	.11	.9	1.1	LOI	1.9X	205	20	2001	JUN	23	0903	17.26	19	18.55	155	14.91	5.99	24	1	.10	.7	1.3	SF1	1.4X	191	5	
2001	JUN	15	1530	26.31	19	4.09	155	21.65	39.76	39	6	.09	1.0	1.3	LOI	1.8X	209	19	2001	JUN	23	1322	35.76	19	17.75	155	12.89	7.30	20	1	.10	.9	1.6	SF2	1.0X	159	9
2001	JUN	15	2357	5.15	19	25.80	155	29.56	11.96	17	2	.11	.5	1.4	KAO	1.2X	72	6	2001	JUN	23	1609	43.03	19	57.45	155	29.93	30.71	50	8	.10	.6	1.3	KEA	3.0X	161	18
2001	JUN	16	0004	49.33	19	28.12	155	26.96	8.16	32	5	.10	.3	.8	KAO	1.7X	48	7	2001	JUN	23	1614	12.80	19	24.79	155	19.24	5.77	19	5	.09	.4	1.3	KAO	1.2X	65	3
2001	JUN	16	0044	54.45	19	17.58	155	38.87	14.37	21	3	.12	.5	.7	DLS	1.4X	81	7	2001	JUN	23	2106	29.71	19	12.50	155	32.83	9.30	27	3	.14	.5	1.0	LSW	1.6X	129	7
2001	JUN	16	0355	17.67	19	4.46	155	22.23	36.63	21	2	.08	1.3	1.9	LOI	1.6X	242	18	2001	JUN	23	2157	15.27	19	18.94	155	13.01	8.92	35	3	.12	.5	.7	SF2	1.9X	125	7
2001	JUN	16	0620	4.42	19	4.08	155	22.19	38.11	19	3	.09	1.4	1.9	LOI	1.5X	270	19	2001	JUN	23	2157	58.75	19	17.73	155	12.69	9.01	25	2	.08	.7	1.0	SF2	1.4X	159	8
2001	JUN	16	0659	8.56	19	19.29	155	12.60	7.80	26	.10	.6	1.0	SF2	1.4X	133	6	2001	JUN	23	2251	11.83	19	18.54	155	12.64	8.63	24	.14	.6	1.3	SF2	1.5X	145	8		
2001	JUN	16	0700	51.80	19	18.89	155	12.73	6.06	25	.09	.6	1.3	SF2	1.3X	139	8	2001	JUN	23	2252	41.28	19	18.70	155	12.93	9.27	45	9	.13	.4	.5	SF2	2.2X	128	7	
2001	JUN	16	1417	0.43	19	9.53	155	36.30	11.39	19	1	.12	.6	1.6	LSW	1.5X	125	15	2001	JUN	23	2256	10.23	19	17.51	155	12.62	9.19	29	4	.09	.6	.9	SF2	1.7X	170	8
2001	JUN	16	2226	25.24	19	20.53	155	48.58	12.23	23	2	.08	.8	.4	KON	1.8X	138	11	2001	JUN	23	2315	56.59	19	17.28	155	12.49	9.18	23	2	.09	.8	1.2	SF2	1.6X	174	8
2001	JUN	17	0022	2.63	19	16.70	155	25.69	9.53	19	1	.10	.5	.9	LSW	1.6X	103	5	2001	JUN	23	20025	2.74	19	19.64	155	7.85	7.83	24	2	.09	.6	.5	SF4	1.4X	146	4
2001	JUN	17	0033	43.96	19	20.33	155	19.47	2.63	14	1	.07	.4	1.2	SWR	1.4X	113	5	2001	JUN	23	20042	17.40	19	17.71	155	12.67	9.86	25	2	.07	.5	.6	SF2	1.5X	159	8
2001	JUN	17	0408	51.22	19	25.31	155	30.00	11.26	23	3	.08	.4	1.0	KAO	1.5X	43	7	2001	JUN	24	0056	12.64	19	17.47	155	12.62	9.26	17	1	.09	.8	1.5	SF2	1.3X	184	8
2001	JUN	17	1813	7.98	19	19.68	155</td																														

	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	
	YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
53	2001	JUN	26	0821	4.66	19	19.18	155	8.84	9.12	33	6	.11	.6	.6	SF4	1.9X	100	4	
	2001	JUN	26	0950	54.30	19	26.50	155	22.46	9.95	27	4	.12	.4	.9	KAO	1.3X	48	4	
	2001	JUN	26	1010	47.38	19	22.89	155	26.60	9.88	16	1	.08	.5	.9	KAO	1.1U	74	2	
	2001	JUN	26	1250	49.20	19	44.29	155	44.96	19.21	14	2	.08	1.5	2.8	HUA	1.5X	237	11	
	2001	JUN	27	0721	57.51	19	12.73	155	41.30	9.05	21	2	.14	.6	2.4	LSW	1.5X	114	16	
	2001	JUN	27	0842	41.84	19	12.86	155	29.44	7.59	15	2	.09	.6	1.1	LSW	1.3X	139	4	
	2001	JUN	27	1335	29.33	19	23.93	155	26.62	10.65	20	3	.11	.5	1.1	KAO	1.3X	48	3	
	2001	JUN	27	1646	31.04	19	23.84	155	26.62	10.41	33	3	.09	.4	.6	KAO	1.5X	37	3	
	2001	JUN	27	1839	42.15	19	24.88	155	28.25	8.67	16	1	.12	.6	1.2	KAO	1.3X	65	5	
	2001	JUN	27	2134	59.13	19	15.69	155	31.60	7.70	28	3	.14	.5	1.0	LSW	1.7X	132	3	
	2001	JUN	27	2206	10.55	19	21.86	155	3.92	6.68	24	2	.11	.6	.8	SF5	1.4X	165	5	
	2001	JUN	27	2213	56.07	19	19.64	155	7.20	10.37	24	1	.09	.9	.3	SF4	1.4X	166	4	
	2001	JUN	28	0140	14.79	19	34.47	155	38.22	11.46	16	3	.14	.8	1.2	MLO	1.1X	116	8	
	2001	JUN	28	2200	41.76	19	21.95	155	0.55	7.95	31	2	.14	.8	.5	SF5	1.8X	179	7	
	2001	JUN	29	0026	50.79	19	18.59	155	13.69	8.22	25	1	.11	.6	1.0	SF2	1.2X	145	8	
	2001	JUN	29	0621	30.82	19	15.01	155	37.46	9.17	21	4	.13	.5	1.8	LSW	1.2X	96	13	
	2001	JUN	29	0835	16.96	19	58.62	155	32.52	20.27	18	3	.10	1.1	2.6	KEA	1.8X	169	23	
	2001	JUN	29	1445	21.75	19	18.77	155	13.97	9.62	44	6	.13	.4	.5	SF2	2.1X	129	6	
	2001	JUN	30	1305	17.94	19	17.44	155	47.21	3.48	22	3	.13	.5	2.0	KON	1.5X	83	9	
	2001	JUN	30	1322	27.95	19	41.71	156	4.93	10.69	41	4	.13	1.1	.4	HUA	2.4X	191	8	
	2001	JUN	30	1408	10.68	19	24.59	155	20.85	7.68	15	2	.10	.5	2.0	KAO	1.6X	73	6	
	2001	JUN	30	1451	4.89	19	47.70	156	4.27	3.87	16	2	.12	1.6	1.7	HUA	1.4X	288	27	
	2001	JUN	30	1901	48.36	19	29.39	155	26.68	8.05	24	6	.09	.3	.9	KAO	1.3X	69	5	
	2001	JUN	30	2255	53.78	19	20.22	155	8.39	5.82	30	2	.12	.6	1.0	SF4	1.6X	105	4	
	2001	JUL	1	0332	17.62	19	20.70	155	53.31	13.96	26	6	.11	1.0	.4	KON	1.4X	199	9	
	2001	JUL	1	0616	58.94	19	25.61	155	29.36	10.80	20	2	.10	.4	.9	KAO	1.1X	69	6	
	2001	JUL	1	1432	49.18	19	26.96	155	24.34	12.89	20	4	.11	.6	1.1	KAO	1.2X	60	6	
	2001	JUL	1	1517	1.61	19	40.41	155	8.43	14.22	23	3	.09	.7	.7	HIL	1.2X	175	12	
	2001	JUL	1	2117	11.28	19	24.59	155	16.88	1.50	11	2	.10	.4	.3	SNC	1.2X	84	1	
	2001	JUL	1	2304	16.87	19	26.81	155	28.98	9.26	33	4	.11	.3	.9	KAO	1.6X	46	8	
	2001	JUL	2	0406	45.67	19	20.33	155	12.78	32.06	41	8	.12	.6	.8	DEP	2.0X	119	4	
	2001	JUL	2	0437	1.79	19	29.44	156	1.60	11.19	14	2	.12	1.9	.7	KON	1.3X	306	11	
	2001	JUL	2	0722	25.47	19	28.89	155	26.23	10.18	35	6	.12	.4	.8	KAO	1.6X	48	5	
	2001	JUL	2	0902	12.34	19	28.02	155	14.34	31	12	47	10	.5	.9	DEP	2.0X	53	4	
	2001	JUL	2	1231	32.28	19	20.04	155	8.36	6.69	40	8	.13	.5	.6	SF4	2.1X	111	5	
	2001	JUL	2	1958	21.04	19	32.40	155	36.87	11.16	21	6	.16	.8	.7	MLO	1.1X	174	3	
	2001	JUL	2	2258	34.02	19	20.05	155	11.45	7.71	34	5	.11	.5	.8	SF3	1.7X	116	5	
	2001	JUL	3	0906	12.59	19	52.08	155	38.18	32.58	33	6	.12	.9	1.3	KEA	2.0X	218	21	
	2001	JUL	3	1538	1.52	19	32.39	155	36.56	9.43	38	5	.12	.5	.6	MLO	2.1X	134	6	
	2001	JUL	3	1622	8.91	20	49.67	155	57.68	15.99	31	8	.14	2.2	5.8	DIS	# 2.2X	247	34	
	2001	JUL	3	1717	29.16	20	0.07	155	38.66	10.99	22	3	.11	.9	.9	KOH	1.5X	156	20	
	2001	JUL	3	1828	42.20	19	20.16	155	7.62	7.35	47	10	.11	.4	.6	SF4	2.2X	123	5	
	2001	JUL	3	1926	4.36	19	19.81	155	8.64	9.48	34	7	.10	.4	.4	SF4	1.6X	105	5	
	2001	JUL	3	1926	51.03	19	19.03	155	8.83	7.03	38	8	.10	.5	.7	SF4	1.8X	106	3	
	2001	JUL	4	0406	11.09	19	41.23	155	13.40	30.24	36	5	.11	.6	1.6	KEA	1.8X	114	20	

	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	
	YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
53	2001	JUL	4	0601	42.66	19	27.53	155	36.49	10.64	29	7	.12	.4	.6	MLOT	1.1X	58	1	
	2001	JUL	4	0958	22.39	19	31.89	155	30.77	51.91	16	1	.09	1.7	2.3	DMLT	2.2X	136	5	
	2001	JUL	4	1332	43.28	19	24.66	155	29.49	8.46	37	6	.09	.3	.8	KAO	1.7X	50	5	
	2001	JUL	4	1626	19.57	19	11.08	155	33.18	3.85	28	3	.14	.6	2.8	LSW	1.6X	139	9	
	2001	JUL	4	2022	23.49	19	19.35	155	13.07	8.04	32	3	.13	.6	.9	SF2	1.5X	133	6	
	2001	JUL	5	0225	50.82	19	24.88	155	38.76	3.60	24	5	.11	.6	.5	MLO	1.2X	127	2	
	2001	JUL	5	1309	59.31	19	16.86	155	31.30	6.19	40	7	.15	.3	1.2	LSW	1.7X	58	4	
	2001	JUL	5	1711	40.26	19	25.09	155	19.44	5.12	23	6	.10	.4	1.1	KAO	1.2X	104	3	
	2001	JUL	5	1900	59.97	20	9.71	155	28.20	0.00	46	9	.12	1.0	.3	KEA	# 2.2X	192	33	
	2001	JUL	5	1940	37.14	19	20.17	155	11.59	7.04	37	6	.11	.5	.6	SF3	1.3X	123	5	
	2001	JUL	5	2022	54.61	19	13.04	155	31.09	6.42	32	4	.13	.6	.9	LSW	1.7X	132	4	
	2001	JUL	6	0451	56.19	18	54.66	155	14.02	9.62	29	4	.11	1.2	.7	LOI	1.9X	247	40	
	2001	JUL	6	0718	26.36	19	29.52	155	27.05	4.92	24	5	.11	.4	2.1	KAO	1.4X	98	5	
	2001	JUL	6	0725	13.96	19	20.65	155	13.03	7.25	32	5	.09	.4	.5	SF2	1.2X	115	4	
	2001	JUL	6	1057	21.62	19	24.22	155	15.58	1.64	39	9	.12	.2	.3	SEC	2.4X	57	2	
	2001	JUL	6	1618	2.77	19	30.27	155	26.56	5.93	22	6	.09	.3	1.0	MLO	1.2X	119	4	
	2001	JUL	7	0117	11.30	19	21.12	155	4.64	6.54	32	4	.12	.6	.8	SF5	1.5X	157	6	
	2001	JUL	7	0339	31.27	19	20.45	155	7.43	7.55	39	8	.11	.5	.6	SF4	2.0X	125	5	
	2001	JUL	7	0850	1.97	19	19.68	155	7.80	8.45	39	8	.09	.4	.4	SF4	2.1X	121	4	
	2001	JUL	7	0935	31.77	19	57.13	155	17.69	10.58	22	3	.12	.5	.5	KEA	1.5X	251	9	
	2001	JUL	7	1032	40.93	19	29.78	155	17.41	31.82	42	8	.09	.7	.9	DEP	2.3X	125	4	
	2001	JUL	7	1338	35.94	19	22.34	155	29.71	9.86	42	7	.11	.3	.7	KAO	2.1X	38	4	
	2001	JUL	7	1437	51.14	19	26.34	155	53.91	12.07	28	6	.17	.8	.5	KON	1.5X	169	6	

	ORIGIN TIME (HST)												ORIGIN TIME (HST)																									
YEAR	MON	DA	HRMN	SEC	LAT N			LON W			DEPTH N			N RMS			ERH			ERZ			LOC			PREF			N			AZ			MIN			
					DEG	MIN	SEC	DEG	MIN	SEC	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS								
2001	JUL	11	1107	57.46	19	18.68	155	12.90	7.75	35	5	.11	.5	.7	SF2	1.6X	143	7	2001	JUL	19	0643	42.98	19	17.69	155	16.34	6.67	39	3	.14	.5	.8	SF1	2.0X	139	4	
2001	JUL	11	1226	0.47	19	11.34	155	28.67	7.97	30	3	.12	.7	1.2	LSW	1.6X	149	7	2001	JUL	19	1820	28.21	19	16.85	154	58.74	43.96	30	7	.14	2.2	1.0	LER	1.3X	316	27	
2001	JUL	11	1239	22.03	19	11.72	155	28.80	8.15	32	2	.13	.7	.9	LSW	1.8X	188	7	2001	JUL	19	2305	19.76	19	19.71	155	8.89	7.17	33	4	.11	.5	.8	SF4	1.6X	99	5	
2001	JUL	11	1253	6.91	19	22.42	155	30.19	10.66	20	4	.05	.3	.9	KAO	1.5X	50	5	2001	JUL	20	0745	51.86	19	25.64	154	59.77	3.60	22	.10	.7	.6	.SLE	1.6X	107	2		
2001	JUL	11	1413	54.00	20	0.20	155	32.20	1.74	16	6	.15	.7	.5	KEA	1.7X	182	24	2001	JUL	20	0921	48.81	19	51.98	155	21.52	32.44	40	9	.10	.6	1.0	KEA	1.8X	88	3	
2001	JUL	11	1936	50.51	19	19.64	155	8.85	6.70	39	8	.09	.4	.7	SF4	1.8X	95	5	2001	JUL	20	1143	24.17	19	24.46	155	16.55	16.86	20	3	.11	1.4	1.4	DEP	.9X	208	4	
2001	JUL	11	2330	30.59	19	18.82	155	13.15	8.29	36	7	.09	.5	.6	SF2	1.5X	155	7	2001	JUL	20	1405	15.65	19	23.30	155	29.77	10.26	25	4	.06	.4	.8	KAO	1.5X	45	4	
2001	JUL	11	2333	51.96	19	18.77	155	13.26	9.20	27	4	.11	.6	.8	SF2	1.1X	142	7	2001	JUL	20	1642	22.49	19	24.01	155	15.91	2.36	17	5	.09	.3	.4	SEC	1.2X	114	2	
2001	JUL	12	0451	30.52	19	19.77	154	44.68	51.39	33	4	.11	1.8	1.1	LER	1.5X	284	18	2001	JUL	20	1800	14.32	19	16.69	155	30.39	9.39	24	2	.09	.5	1.1	LSW	1.5X	82	3	
2001	JUL	12	0811	41.72	19	48.51	155	34.20	21.93	20	2	.10	.9	2.3	KEA	1.4X	184	24	2001	JUL	20	1809	40.20	19	13.40	155	34.30	9.95	20	2	.11	.5	1.1	LSW	1.3X	117	8	
2001	JUL	12	0833	40.77	19	9.78	155	22.33	49.07	25	5	.10	1.2	1.7	LOI	1.5X	220	9	2001	JUL	21	0126	45.42	19	28.33	155	27.05	9.53	38	7	.12	.3	.8	KAO	1.7X	47	7	
2001	JUL	12	1049	53.96	19	27.98	155	27.94	9.42	27	6	.10	.3	1.2	KAO	1.4X	64	7	2001	JUL	21	0801	7.85	18	53.65	155	15.84	12.54	42	6	.11	1.0	1.3	LOI	3.4X	265	41	
2001	JUL	12	1319	3.26	19	25.24	155	19.37	5.75	23	6	.10	.4	1.1	KAO	1.4X	77	3	2001	JUL	21	1255	36.11	20	53.84	156	12.99	27.83	17	4	.09	1.9	1.6	DIS	2.3X	275	21	
2001	JUL	12	1531	46.80	18	53.05	155	14.53	12.35	34	3	.10	1.7	2.5	LOI	2.1X	259	43	2001	JUL	21	1354	12.26	19	20.12	155	24.61	9.85	19	2	.08	.5	1.0	SWR	.9X	64	2	
2001	JUL	13	0318	35.89	19	21.40	155	4.47	7.33	32	2	.12	.6	.5	SF5	1.6X	165	5	2001	JUL	21	1400	52.70	19	13.69	155	32.22	6.92	25	2	.18	.8	1.5	LSW	1.5X	167	4	
2001	JUL	13	2021	17.28	19	19.16	155	15.28	6.92	35	6	.12	.5	.9	SF1	1.3X	136	6	2001	JUL	21	1843	8.82	19	10.46	155	23.15	41.32	34	5	.10	1.1	1.2	DEP	1.7X	203	7	
2001	JUL	13	2339	2.70	19	34.66	155	57.62	11.08	23	3	.13	.8	.4	KON	1.5X	170	11	2001	JUL	21	1852	6.87	19	37.19	155	57.19	7.72	18	1	.13	.8	.8	KON	1.8X	173	14	
2001	JUL	14	0017	30.81	19	13.52	155	33.03	11.06	31	7	.12	.5	.9	LSW	1.1X	167	6	2001	JUL	21	1929	41.28	18	51.35	155	14.19	11.39	20	2	.07	1.9	1.4	LOI	2.1X	276	46	
2001	JUL	14	0422	59.84	19	21.85	155	14.40	13.18	41	8	.11	.5	.4	DEP	1.6X	100	3	2001	JUL	21	2228	25.92	19	12.74	155	27.88	0.02	34	7	.15	.6	.3	LSW	#	1.5X	144	7
2001	JUL	14	0527	53.12	19	9.07	155	32.03	44.62	33	4	.15	1.3	1.8	DLST	-	209	12	2001	JUL	21	2332	8.14	18	55.18	155	15.96	11.27	17	.11	3.0	.9	LOI	1.3X	249	38		
2001	JUL	14	0655	7.24	19	21.76	155	5.08	7.16	27	2	.10	.6	.7	SF5	1.3X	152	5	2001	JUL	21	2338	41.24	19	11.91	155	24.86	14.68	17	3	.11	1.5	.5	DEP	1.4X	259	5	
2001	JUL	14	1956	51.62	19	25.10	155	19.40	6.48	25	8	.09	.4	1.0	KAO	1.1X	69	3	2001	JUL	21	2340	5.98	18	53.60	155	14.01	10.42	32	5	.12	1.3	.7	LOI	2.2X	256	42	
2001	JUL	14	2251	8.64	19	19.16	155	15.65	6.26	26	4	.09	.6	1.0	SF1	1.4X	145	6	2001	JUL	21	2342	14.76	18	55.46	155	15.81	14.40	25	.10	2.1	114.4	LOI	-	2.0X	248	38	
2001	JUL	15	0207	32.96	19	19.78	155	10.14	7.64	29	7	.10	.5	.8	SF3	1.4X	109	4	2001	JUL	21	2344	35.90	18	54.17	155	14.94	10.57	9	.07	3.6	1.3	LOI	1.5U	267	40		
2001	JUL	15	0434	20.94	19	1.88	155	12.55	17.01	40	7	.12	1.111	7	LOI	-	226	30	2001	JUL	21	2345	22.02	18	55.12	155	15.83	12.34	27	2	.10	1.7	1.1	LOI	1.8X	249	38	
2001	JUL	15	0716	0.15	19	10.99	155	6.76	52.36	36	6	.13	1.1	1.6	DEP	1.9X	209	12	2001	JUL	21	2346	16.97	18	54.17	155	15.11	11.87	28	.10	2.1	1.2	LOI	2.0X	253	40		
2001	JUL	15	0732	54.24	18	53.28	155	32.44	39.47	23	3	.09	1.9	1.6	DLS	1.5X	281	17	2001	JUL	21	2350	40.02	18	52.67	155	12.56	39.27	24	4	.12	1.3	2.1	LOI	1.8X	274	45	
2001	JUL	15	0907	3.51	19	8.96	155	36.53	0.61	22	12	.12	.6	.8	LSW	1.2X	126	16	2001	JUL	21	2352	26.87	18	50.99	155	11.73	27.67	25	4	.10	1.5	4.2	LOI	2.2X	293	48	
2001	JUL	16	0456	27.99	19	19.67	155	9.74	8.11	34	5	.10	.5	.6	SF3	1.4X	106	4	2001	JUL	21	2425	6.65	18	52.20	155	11.65	9.93	37	7	.13	1.2	.8	LOI	2.7X	275	46	
2001	JUL	16	0858	58.52	19	16.82	155	27.26	7.07	41	5	.14	.4	.8	LSW	2.5X	86	6	2001	JUL	22	0557	37.30	18	54.92	155	15.06	12.98	14	.10	2.0	1.9	LOI	1.6X	251	39		
2001	JUL	16	1421	53.84	19	16.46	155	27.74	12.28	18	1	.10	.7	1.4	LSW	1.5X	118	5	2001	JUL	22	0557	54.55	18	51.96	155	14.06	11.77	35	4	.12	1.2	1.6	LOI	2.4X	256	45	
2001	JUL	16	2319	26.97	19	12.64	155	33.13	5.51	19	.14	.6	1.5	LSW	1.5X	128	7	2001	JUL	22	0627	52.24	18	55.90	155	12.95	12.70	16	.08	2.6	1.2	LOI	1.5X	265	39			
2001	JUL	17	0230	8.75	19	24.21	155	16.94	15.90	36	8	.08	.4																									

ORIGIN TIME (HST)																			
YEAR	MON	DA	HR	MIN	N	LON	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN		
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS	
2001	JUL	23	0716	58.57	19	18.96	155	13.10	6.13	26	.13	.6	1.4	SF2	1.2X	138	7		
2001	JUL	23	0913	23.23	18	54.03	155	12.88	11.38	19	2	.11	2.6	1.0	LOI	1.8X	270	42	
2001	JUL	23	1236	28.33	19	18.30	155	13.27	0.01	30	6	.12	.4	.3	SSF #	1.2X	149	8	
2001	JUL	23	1257	0.45	19	20.00	155	10.22	7.80	41	8	.14	.5	.7	SF3	1.8X	107	4	
2001	JUL	23	1736	17.43	18	55.37	155	12.74	8.20	14	1	.14	2.3	1.0	LOI	1.5X	294	40	
2001	JUL	24	1509	26.50	19	23.33	155	15.16	11.45	38	8	.11	.4	.5	INT	1.5X	81	2	
2001	JUL	24	1644	43.30	19	16.38	155	31.58	7.90	22	3	.13	.5	1.4	LSW	1.2X	111	4	
2001	JUL	24	1711	23.38	19	18.96	154	58.86	39.71	22	4	.09	1.7	1.3	LER	1.5X	239	17	
2001	JUL	24	1944	10.70	19	26.18	154	57.21	3.14	12	2	.09	1.6	.6	SLE	2.3X	157	3	
2001	JUL	24	2336	3.60	19	14.72	155	35.00	9.05	16	2	.09	.5	1.4	LSW	1.3X	151	9	
2001	JUL	25	0003	23.51	19	26.94	155	25.14	6.34	16	1	.10	.5	2.2	KAO	1.0X	53	6	
2001	JUL	25	0036	23.16	19	20.62	155	55.43	16.82	19	4	.06	1.2	1.3	KON	1.3X	215	10	
2001	JUL	25	2023	51.60	19	58.41	155	25.20	20.15	19	11	.13	9.7	2.9	KEA	1.1X	298	12	
2001	JUL	25	2144	25.39	19	59.11	155	30.44	10.67	22	4	.12	.9	.5	KEA	1.2X	181	20	
2001	JUL	26	0052	57.35	19	23.88	155	25.57	10.14	26	4	.11	.4	.9	KAO	1.2X	46	4	
2001	JUL	26	0215	1.37	19	37.35	155	10.60	11.87	29	8	.13	.4	.7	KEA	1.0X	90	18	
2001	JUL	26	0251	32.95	19	16.49	155	12.02	11.56	39	8	.13	.6	.4	SF3	1.4X	183	7	
2001	JUL	26	0258	36.42	19	16.37	155	11.67	11.73	27	3	.12	.9	.4	SF3	1.3X	184	7	
2001	JUL	26	0303	39.16	19	16.69	155	11.26	11.72	29	4	.12	.8	.4	SF3	1.2X	182	6	
2001	JUL	26	0453	55.12	19	20.05	155	6.02	8.05	31	5	.10	.5	.5	SF4	1.2X	162	6	
2001	JUL	26	0559	14.54	19	24.05	155	30.04	9.43	22	7	.09	.4	.9	KAO	1.2X	74	5	
2001	JUL	26	0817	31.83	19	14.18	155	29.40	35.34	21	5	.10	.9	1.4	DLS	1.4X	165	2	
2001	JUL	26	0833	40.70	19	19.73	155	15.24	11.15	30	5	.13	.6	.6	SF1	1.2X	130	4	
2001	JUL	26	0919	41.27	18	49.52	155	12.00	11.37	21	3	.11	4.1	6.4	LOI	1.8X	283	50	
2001	JUL	26	1343	15.24	19	22.33	155	5.45	8.56	40	8	.11	.4	.5	SF4	1.9X	137	4	
2001	JUL	26	1448	44.44	19	22.43	155	29.86	9.35	36	5	.11	.3	.6	KAO	1.5X	37	4	
2001	JUL	26	1511	3.51	19	20.53	155	4.42	8.32	22	1	.11	.7	.5	SF5	1.2X	166	7	
2001	JUL	26	1608	2.97	19	13.06	155	26.98	35.26	4611	.09	.6	.8	.8	DLS	1.7X	146	6	
2001	JUL	27	0014	57.06	19	20.61	155	5.06	6.79	40	8	.12	.5	.7	SF5	1.4X	159	7	
2001	JUL	27	0157	12.03	19	24.29	155	16.85	1.27	13	5	.11	.3	.3	SSC	1.0X	92	1	
2001	JUL	27	0514	0.77	19	12.12	155	21.23	49.25	43	8	.11	.9	1.0	DEP	1.5X	167	6	
2001	JUL	27	1151	27.67	19	20.63	155	7.15	6.67	21	2	.09	.6	1.2	SF4	1.2X	156	5	
2001	JUL	27	1950	15.37	19	17.05	155	49.47	10.76	16	1	.10	.8	.8	KON	.9U	152	5	
2001	JUL	27	2128	59.79	19	25.32	155	15.87	6.08	4410	.11	.3	.6	.4	INT	2.2X	43	2	
2001	JUL	28	0639	37.84	19	19.87	155	8.22	7.62	26	4	.08	.5	.7	SF4	1.4X	110	5	
2001	JUL	28	0828	26.77	19	26.63	155	17.78	15.48	40	8	.10	.5	.3	DEP	2.0X	47	2	
2001	JUL	28	0930	50.05	19	55.77	155	44.00	10.05	38	8	.13	.6	.7	KOH	2.4X	126	23	
2001	JUL	28	1905	18.12	19	26.60	154	54.06	6.08	18	3	.12	.6	.6	LER	1.2X	174	3	
2001	JUL	29	0006	7.11	19	16.18	155	32.50	4.46	28	3	.19	.5	2.2	LSW	1.4X	88	5	
2001	JUL	29	0011	36.33	20	6.02	155	33.81	35.49	5113	.11	.7	1.2	KEAF	2.6X	177	23		
2001	JUL	29	0346	12.22	19	45.52	155	23.51	27.76	22	4	.08	.8	1.3	KEA	1.5X	137	7	
2001	JUL	29	1907	6.46	19	21.34	155	10.15	3.39	19	5	.11	.5	.4	SER	1.4X	90	1	
2001	JUL	30	0738	39.60	19	18.03	155	23.60	3.38	31	4	.11	.4	.9	SWR	1.6X	95	4	
2001	JUL	30	0853	6.18	19	25.16	155	16.55	1.90	12	4	.06	.3	.4	SNCL	1.5X	178	1	
2001	JUL	30	0936	10.93	19	20.03	155	8.21	8.16	37	6	.10	.5	.8	SF4	1.4X	114	5	

ORIGIN TIME (HST)																			
YEAR	MON	DA	HR	MIN	N	LON	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN		
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
2001	JUL	30	1105	51.38	19	18.26	155	23.58	5.52	40	9	.14	.4	1.2	SWR	1.9X	94	4	
2001	JUL	30	1219	39.29	19	16.98	155	17.94	30.25	28	8	.10	.8	1.2	DEP	1.3X	186	2	
2001	JUL	30	1239	56.03	19	17.82	155	15.16	8.58	33	3	.10	.5	.5	SF1	1.5X	155	6	
2001	JUL	30	1519	29.43	19	11.59	155	41.37	3.85	19	.15	.613.0	.LSW	-	1.3X	93	9		
2001	JUL	30	1536	50.60	19	32.92	155	58.51	36.11	26	4	.08	1.6	2.0	KON	2.0X	282	33	
2001	JUL	31	0203	33.01	19	22.54	155	29.76	8.26	33	4	.10	.3	.7	KAO	1.8X	47	4	
2001	JUL	31	0244	20.31	19	22.51	155	29.82	8.59	37	7	.09	.3	.7	KAO	1.9X	44	4	
2001	JUL	31	0614	33.53	19	19.61	155	7.37	5.45	27	4	.13	.5	1.2	SF4	1.1X	138	4	
2001	JUL	31	0656	47.63	19	56.00	155	31.04	37.63	18	5	.10	1.1	1.6	KEA	1.4X	232	19	
2001	JUL	31	1046	25.25	19	39.59	156	24.21	43.92	27	3	.15	1.6	4.1	DIS	2.2X	227	71	
2001	JUL	31	1216	53.06	19	12.28	155	28.51	0.30	43	8	.14	.4	.3	LSW	1.7X	145	9	
2001	JUL	31	1423	52.64	19	22.28	155	26.73	9.35	38	8	.11	.3	.6	KAO	1.8X	43	2	
2001	JUL	31	1627	18.00	19	18.78	155	15.17	8.31	43	8	.13	.4	.6	SF1	1.7X	142	5	
2001	JUL	31	2146	23.26	19	18.22	155	13.10	8.54	29	5	.10	.5	.7	SF2	1.1X	168	8	
2001	JUL	31	2209	54.79	19	26.91	155	29.21	12.13	30	6	.11	.4	.8	KAO	1.5X	46	8	
2001	AUG	1	1348	13.89	19	20.91	155	4.91	6.18	28	2	.10	.6	.8	SF5	1.5X	208	7	
2001	AUG	1	1843	16.09	19	27.10	155	51.98	14.31	21	3	.12	1.2	.4	KON	1.5X	191	7	
2001	AUG	1	1844	4.24	19	24.96	155	19.50	4.17	21	5	.09	.5	1.3	KAO	1.3X	99	3	
2001	AUG	1	2030	53.13	19	23.13	155	14.51	3.87	42	9	.12	.3	.4	SEC	2.4X	86	3	
2001	AUG	2	0517	31.32	19	22.02	155	27.97	8.18	19	2	.12	.5	1.0	KAO	.9X	71	1	
2001	AUG	2	0814	30.21	19	22.48	155	29.80	8.91	29	4	.10	.4	.9	KAO	1.1X	47	4	
2001	AUG	2	0946	47.01	19	33.52	155	41.91	7.70	15	1	.12	.8	2.1	MLO	1.1X	126	12	
2001	AUG	2	0959	42.09	19	27.02	155	28.81	8.73	18	4	.13	.6	2.0	KAO	1.0U	76	8	
2001	AUG	2	1619	25.09	19	20.19	155	8.19	8.75	38	6	.09	.6	.6	SF4	1.6X	114	5	
2001	AUG	2	2124	57.38	19	19.56	156	10.88	48.44	20	5</td								

ORIGIN TIME (HST)				LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
2001	AUG	5	0620	51.94	18	57.68	155	34.51	39.57	33	8	.10	.9	1.2	DLS	2.0X	233	10	
2001	AUG	5	0723	1.12	19	15.50	155	3.23	44.59	36	3	.11	1.1	1.6	DEP	1.7X	219	9	
2001	AUG	5	0910	17.73	19	20.30	155	26.91	10.50	20	2	.13	.6	1.1	KAO	.9X	65	4	
2001	AUG	5	1020	55.95	19	12.47	155	26.25	38.24	21	5	.13	1.3	1.5	DLS	1.1X	213	5	
2001	AUG	5	1604	55.95	19	29.94	155	49.12	14.88	23	5	.14	1.0	.6	KON	1.1X	184	21	
2001	AUG	5	2239	48.28	19	45.55	155	33.00	13.05	26	6	.11	.6	.4	KEA	1.6X	160	10	
2001	AUG	6	0010	44.59	19	5.63	155	30.46	51.92	15	.11	3.8	7.8	DLST	1.4X	249	17		
2001	AUG	6	0132	22.41	18	56.21	155	17.18	12.90	21	2	.10	1.6	1.0	LOI	1.5X	245	36	
2001	AUG	6	1052	48.04	19	19.50	155	11.56	7.31	36	5	.12	.5	.8	SF3	1.3X	125	6	
2001	AUG	6	1757	24.15	19	19.39	155	8.29	5.94	30	3	.10	.5	1.1	SF4	1.4X	113	4	
2001	AUG	6	2221	15.65	19	59.91	155	33.55	10.82	16	2	.12	1.7	.8	KEA	1.9X	256	26	
2001	AUG	7	1307	17.27	19	19.33	155	15.32	8.10	5212	.13	.4	.5	SF1	2.0X	124	4		
2001	AUG	7	1614	53.33	19	27.82	155	24.34	9.82	36	7	.10	.4	.8	KAO	1.4X	35	4	
2001	AUG	7	1623	38.45	19	37.07	156	7.02	40.74	40	5	.11	.9	2.2	KON	2.3X	202	47	
2001	AUG	7	1646	55.01	19	25.45	155	19.07	6.72	27	6	.11	.4	1.0	KAO	1.3X	48	3	
2001	AUG	8	0002	21.97	19	22.43	155	29.93	9.50	25	3	.06	.4	.8	KAO	1.2X	48	4	
2001	AUG	8	0325	2.23	20	17.64	155	57.66	41.26	22	1	.12	1.8	2.6	KOH	1.9X	162	13	
2001	AUG	8	1924	47.97	19	28.61	154	53.59	2.60	25	2	.17	.7	.7	SLE	1.2X	118	4	
2001	AUG	8	2002	52.03	19	28.43	154	53.45	1.46	19	1	.13	.6	.8	SLE	1.8X	122	4	
2001	AUG	8	2101	36.31	18	54.99	155	15.78	10.52	21	5	.16	1.5	.7	LOI	1.2X	262	34	
2001	AUG	9	0031	53.77	19	10.62	155	40.55	0.88	31	3	.13	.4	.6	LSW	1.5X	82	10	
2001	AUG	9	0332	16.19	19	23.76	155	16.81	3.16	17	5	.10	.4	.3	SSC	1.2X	53	0	
2001	AUG	9	0743	40.40	19	26.04	155	18.41	6.71	22	5	.11	6	1.1	INT	1.1X	87	2	
2001	AUG	9	1309	13.36	19	20.10	155	7.41	6.98	40	8	.11	.4	.7	SF4	1.7X	127	5	
2001	AUG	9	1316	6.74	19	11.47	155	20.15	46.80	32	5	.12	1.0	1.5	DEP	1.9X	174	9	
2001	AUG	9	1316	30.34	19	10.74	155	19.99	46.65	23	4	.12	1.1	1.7	DEP	2.0X	180	10	
2001	AUG	9	2008	58.40	19	11.17	155	41.08	12.29	25	6	.12	.5	.7	LSW	1.4X	96	9	
2001	AUG	10	0232	18.54	19	16.81	155	28.53	10.83	39	7	.11	.3	.6	LSW	2.0X	55	4	
2001	AUG	10	0808	7.05	19	17.56	155	29.31	7.06	24	5	.15	.4	1.0	LSW	1.0X	48	5	
2001	AUG	10	1507	5.80	19	25.93	155	15.27	30.15	24	5	.12	1.2	1.1	DEP	1.4X	200	4	
2001	AUG	10	1605	2.10	19	19.16	155	10.16	8.22	30	3	.11	.5	.8	SF3	1.6X	132	5	
2001	AUG	10	2214	17.58	19	12.42	155	34.98	10.96	4610	.12	.4	.6	LSW	4.5U	121	10		
2001	AUG	10	2314	28.42	19	20.30	155	11.70	7.39	28	5	.09	.5	.6	SF3	1.2X	114	5	
2001	AUG	11	0027	38.39	19	25.96	155	18.23	14.47	35	5	.13	.5	.5	DEP	1.5X	48	2	
2001	AUG	11	0139	31.29	19	19.97	155	22.97	32.59	29	5	.11	.7	1.3	DEP	1.7X	76	1	
2001	AUG	11	0658	52.25	19	22.98	155	14.83	5.26	18	7	.11	.6	.8	INT	1.2X	114	2	
2001	AUG	11	1046	55.04	19	22.17	155	14.30	3.23	20	1	.14	.6	.4	SEC	.8X	134	2	
2001	AUG	11	1413	54.53	19	29.87	155	25.15	4.57	16	4	.14	.5	1.4	KAO	1.3X	122	3	
2001	AUG	12	0103	43.00	19	24.17	155	2.83	3.09	31	3	.10	.6	.5	SME	1.8X	140	2	
2001	AUG	12	0828	13.71	19	42.65	156	3.72	29.29	26	7	.12	1.5	2.2	HUA	1.6X	285	24	
2001	AUG	12	2143	26.15	19	22.83	155	51.67	12.54	21	4	.10	1.0	.5	KON	1.3X	178	13	
2001	AUG	12	2153	11.12	19	45.40	155	24.75	22.85	30	5	.10	.7	1.4	KEA	1.4X	86	5	
2001	AUG	13	1236	43.11	19	12.34	155	27.46	15.51	20	4	.10	1.1	.5	DLS	1.2X	204	7	
2001	AUG	13	1243	19.06	19	20.63	155	12.90	7.73	37	8	.11	.4	.6	SF2	1.5X	108	4	
2001	AUG	13	1700	5.33	19	16.08	155	14.27	6.65	26	6	.09	.7	1.1	SF2	1.3X	205	8	

ORIGIN TIME (HST)	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN				
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
2001	AUG	13	2049	8.65	19	22.72	155	12.27	6.87	35	5	.12	.4	.5	SF3	1.5X	127	1	
2001	AUG	13	2050	17.20	19	25.68	155	29.59	9.06	30	6	.09	.3	.8	KAO	1.3X	39	7	
2001	AUG	14	0031	51.88	19	21.13	155	4.37	5.85	35	6	.15	.6	1.0	SF5	1.4X	169	6	
2001	AUG	14	0144	48.39	19	25.43	155	19.20	7.95	26	7	.11	.4	1.0	KAO	1.1X	47	3	
2001	AUG	14	1452	4.89	19	20.23	155	17.16	31.82	42	9	.11	.7	1.0	DEP	1.8X	104	0	
2001	AUG	14	1820	9.64	19	21.57	155	27.48	10.50	38	5	.13	.3	.7	KAO	1.2X	42	2	
2001	AUG	14	1838	6.93	19	19.45	155	9.09	6.54	35	5	.09	.4	.6	SF4	1.0X	88	4	
2001	AUG	14	2029	26.13	19	23.63	155	29.65	9.52	3310		.09	.3	.8	KAO	1.0X	45	4	
2001	AUG	14	2030	27.35	19	11.85	155	27.63	1.11	35	8	.14	.3	.4	LSW	1.4X	113	4	
2001	AUG	14	2325	19.93	18	57.07	155	35.26	43.02	35	7	.09	.8	1.0	DLS	1.8X	242	9	
2001	AUG	14	2332	35.67	19	11.50	155	15.42	46.01	18	4	.13	1.7	1.9	DEP	1.1X	255	16	
2001	AUG	15	0543	3.24	19	20.27	155	10.08	6.46	30	4	.17	.7	.9	SF3	1.2X	110	3	
2001	AUG	15	0811	40.08	19	25.64	155	18.96	7.01	27	6	.10	.4	.8	INT	1.6X	87	2	
2001	AUG	15	1023	5.22	19	31.47	155	43.88	2.96	17	2	.12	.7	1.8	KON	1.3X	85	4	
2001	AUG	15	1420	31.11	19	13.17	155	29.88	41.95	35	8	.11	.7	1.3	DLS	1.5X	74	4	
2001	AUG	15	1742	11.28	19	22.92	155	14.25	3.69	33	7	.10	.3	.4	SEC	1.9X	116	2	
2001	AUG	16	0729	54.19	19	19.99	155	7.58	5.70	40	9	.12	.4	1.0	SF4	1.6X	124	5	
2001	AUG	16	0852	40.50	19	15.79	155	12.15	9.52	21	4	.12	1.0	1.1	SF3	1.2X	266	12	
2001	AUG	16	0921	2.89	19	19.28	155	15.29	7.14	36	6	.12	.4	.7	SF1	1.4X	126	4	
2001	AUG	16	0938	1.71	19	26.51	154	56.54	5.95	29	3	.11	.8	.6	LER	1.6X	151	3	
2001	AUG	16	1140	47.79	19	21.70	155	8.23	7.73	4813	.12	.5	.6	SF4	1.8X	106	3		
2001	AUG	16	1557	59.52	19	49.07	155	21.85	28.64	26	5	.13	1.1	1.6	KEA	1.3X	147	8	
2001	AUG	16	1943	50.80	20	2.23	155	24.64	11.66	37	6	.12	.9	.6	KEAF	2.1X	184	18	
2001	AUG	16	1958	54.75	19	14.46	155	28.61	13.02	35	6	.11	.4	.7	DLS	1.7X	80	3	
2001	AUG	17	0042	1.21	19	20.51	155	6.02	8.04	29	3	.10	.6	.8	SF4	1.5X	148	6	
2001	AUG	17	0108	54.68	19	20.18	155	7.89	6.81	28	4	.11	.5	.8	SF4	1.3X	122	5	
2001	AUG	17	0115	5.22	19	15.75	155	24.31	36.16	32	5	.10	.7	1.2	DEP	1.4X	84	3	
2001	AUG	17	2117	36.29	19	19.93	155	6.21	7.29	23	2	.11	.6	1.0	SF4	1.1X	160	6	
2001	AUG	17	2247	6.94	19	13.77	155	7.36	43.38	30	5	.12	1.2	1.1	DEP	1.4X	229	18	
2001	AUG	18	0523	7.57	19	25.24	155	51.21	13.87	25	4	.13	1.1	.4	KON	1.7X	176	17	
2001	AUG	18	0700	20.18	19	19.75	155	13.49	4.58	24	1	.09	.5	2.3	SSF	1.1X	136	5	
2001	AUG	18	1407	5.75	19	57.64	155	32.05	35.72	24	6	.08	.9	1.0	KEA	1.7X	244	21	
2001	AUG	18	2029	14.70	19	21.33	155	10.86	6.88	22	2	.10	.6	.7	SF3	1.2X	154	2	
2001	AUG	19	0016	26.68	20	2.55	155	55.26	1.23	19	1	.14	.8	1.1	KOH	1.5X	158	16	
2001	AUG	19	1146	30.43	19	19.09	155	13.91	8.24	33	5	.12	.6	.7	SF2	1.4X	171	6	
2001	AUG	19	1408	35.65	19	36.33	155	18.30	11.80	17	3	.10	.8	1.0	KEA	1.1X	176	15	
2001	AUG	19	1449	59.38	19	21.38	155	5.89	7.31	4211	.13	.6	.5	SF4	2.0X	175	5		
2001	AUG	19	1634	52.27	19	16.04	154	57.12	4.94	22	6	.11	1.2	1.0	SLE	1.5X	250	23	
2001	AUG	19	1728	18.06	19	24.75	155	38.32	3.14	24	6	.15	.6	.5	MLO	1.6X	102	1	
2001	AUG	19	1948	13.00	19	47.38	155	33.25	12.69	29	5	.10	.7	.5	KEA	1.4X	173	22	
2001	AUG	20	0728	50.89	19	19.04	155	13.14	6.70	28	4	.12	.5	1.0	SF2	1.0X	128	7	
2001	AUG	20	1332	17.95	19	20.27	155	12.33	7.77	39	6	.11	.4	.5	SF2	1.5X	165	5	
2001	AUG	20	1508	57.94	19	21.03	155	6.35	7.50	26	4	.08	.9	.7	SF4	1.2X	196	5	
2001	AUG	20	1524	46.02	19	29.57	155	58.89	12.00	21	2	.10	1.6	.6	KON	1.7X	270	26	
2001	AUG	21	0106	33.66	19	21.50	155	2.19	6.42	34	4	.12	.7	.8	SF5	1.4X	191	6	

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS			
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM																	

2001 AUG 21 0146 41.08 19 18.63 155 13.33 8.74 37 8 .11 .4 .6 SF2 1.3X 187 7  
 2001 AUG 21 0346 56.24 19 21.57 155 18.72 1.42 18 4 .07 .3 .6 SWR 1.1X 100 5  
 2001 AUG 21 0530 7.84 19 21.29 155 20.29 3.16 22 4 .09 .4 .9 SWR .9X 79 6  
 2001 AUG 21 1118 58.86 19 27.95 155 24.24 10.66 25 6 .09 .5 1.0 KAO 1.4X 70 4  
 2001 AUG 21 1715 47.56 19 22.55 155 30.15 10.28 30 6 .08 .3 .6 KAO 1.3X 85 4

2001 AUG 22 0055 28.87 19 12.66 155 36.84 8.05 22 1 .12 .5 1.1 LSW 1.2X 139 13  
 2001 AUG 22 0200 6.40 19 23.49 155 30.60 9.59 31 7 .09 .3 .8 KAO 1.1X 50 6  
 2001 AUG 22 0238 43.85 19 48.92 155 24.20 23.10 4210 .10 .5 1.1 KEA 1.6X 144 7  
 2001 AUG 22 2131 22.02 19 21.17 155 13.11 8.23 31 6 .13 .5 .4 SF2 1.0X 166 3  
 2001 AUG 22 2202 34.45 19 25.75 155 29.24 9.13 5015 .09 .2 .6 KAO 1.9X 39 7

2001 AUG 23 0100 56.13 19 27.61 155 25.73 8.27 19 4 .12 .4 1.2 KAO 1.1X 84 6  
 2001 AUG 23 0128 19.91 19 17.14 155 14.85 8.63 33 9 .11 .6 .5 SF1 1.2X 191 7  
 2001 AUG 23 0714 7.65 19 21.25 155 4.05 6.55 30 .11 .8 .6 SF5 1.4X 180 6  
 2001 AUG 23 1040 16.03 19 14.01 155 26.26 7.75 23 1 .11 .4 1.0 LSW 1.3X 118 4  
 2001 AUG 23 1530 34.57 19 30.88 155 43.03 6.75 17 3 .12 .7 1.8 KON 1.2X 101 5

2001 AUG 23 1941 10.45 19 10.69 155 28.23 35.78 29 9 .10 .9 1.3 DLS 1.2X 112 2  
 2001 AUG 23 2128 46.50 19 22.78 155 17.13 2.14 15 5 .07 .3 .2 SSC 1.0X 89 1  
 2001 AUG 23 2219 50.66 19 19.57 155 6.46 1.75 25 4 .14 .9 .7 SSF .9X 211 7  
 2001 AUG 24 0003 22.46 19 19.59 155 6.32 5.01 24 2 .11 .8 2.2 SF4 1.0X 177 7  
 2001 AUG 24 0041 53.58 19 24.43 155 49.80 13.86 33 5 .13 .9 .3 KON 2.3X 195 13

2001 AUG 24 0538 2.71 18 50.89 156 5.59 42.71 43 9 .11 1.1 1.6 DIS 2.3X 302 47  
 2001 AUG 24 0910 34.58 19 22.52 155 26.84 9.67 25 2 .10 .4 .8 KAO 1.3X 37 1  
 2001 AUG 24 1011 49.92 19 16.59 155 28.04 14.63 23 3 .15 .5 .8 DLS 1.0X 58 5  
 2001 AUG 24 1039 57.55 19 47.85 155 18.39 27.37 28 6 .12 .8 1.5 KEA 1.7X 129 11  
 2001 AUG 24 1116 42.75 19 17.36 155 28.14 10.92 5113 .14 .3 .4 LSW 2.5X 51 5

2001 AUG 24 1300 25.88 19 48.43 156 3.91 11.29 20 6 .11 1.8 1.1 HUA 1.5X 286 46  
 2001 AUG 24 2356 0.09 19 11.25 155 28.51 35.09 3810 .08 .6 .9 DLS 1.5X 97 3  
 2001 AUG 25 0016 47.96 19 22.22 155 13.06 3.50 20 6 .08 .6 .4 SER 1.6X 140 1  
 2001 AUG 25 0128 32.69 19 25.07 155 16.50 1.80 14 4 .08 .6 .3 SNCL 1.3X 154 1  
 2001 AUG 25 0158 35.12 19 25.24 155 16.58 9.75 16 5 .13 1.0 .8 INTL 1.9X 156 1

2001 AUG 25 0158 58.42 19 21.73 155 27.95 9.19 31 2 .09 .3 .7 KAO 1.5X 41 2  
 2001 AUG 25 0215 23.59 19 18.56 155 14.28 9.64 40 5 .11 .4 .4 SF2 1.8X 165 8  
 2001 AUG 25 0219 59.64 19 19.19 155 13.92 0.86 15 3 .11 .7 .7 SSF .9X 223 6  
 2001 AUG 25 0756 23.20 19 19.06 155 15.61 6.30 26 4 .12 .6 .8 SF1 1.0X 171 4  
 2001 AUG 25 1520 48.88 19 18.89 155 14.29 8.49 31 6 .13 .6 .9 SF2 1.0X 180 6

2001 AUG 25 2317 11.84 19 20.35 155 7.61 9.76 32 6 .08 .6 .6 SF4 1.2X 197 5  
 2001 AUG 26 0114 2.29 19 29.42 155 28.14 6.80 3911 .11 .3 1.0 KAO 1.7X 53 5  
 2001 AUG 26 0402 45.69 19 11.36 155 15.25 53.21 28 5 .14 1.2 1.8 DEP 1.8X 189 14  
 2001 AUG 26 0858 7.11 19 21.86 155 13.23 32.66 3410 .11 .8 1.0 DEP 1.1X 153 1  
 2001 AUG 26 0941 28.69 19 30.24 155 29.33 4.75 21 5 .13 .4 2.1 MLO .9X 69 4

2001 AUG 26 1348 8.92 19 14.50 155 32.83 10.38 26 5 .13 .4 1.4 LSW 1.0X 111 5  
 2001 AUG 26 1407 54.40 19 19.17 155 29.12 9.34 28 6 .12 .4 1.0 KAO 1.0X 59 7  
 2001 AUG 26 1409 13.97 19 21.57 155 18.43 4.25 17 4 .08 .4 1.1 SWR .9X 71 3  
 2001 AUG 26 1937 12.31 19 22.46 155 17.10 2.91 26 7 .11 .3 .4 SSC 1.4X 105 2  
 2001 AUG 26 2348 38.90 19 14.50 155 32.43 6.44 26 5 .17 .5 1.3 LSW 1.0X 109 4

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS		
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM																

2001 AUG 27 0259 18.19 19 22.26 155 11.61 7.74 32 5 .10 .5 .5 SF3 1.1X 141 3  
 2001 AUG 27 0534 46.13 19 22.51 155 13.42 5.86 33 5 .13 .4 .5 SF2 .9X 130 1  
 2001 AUG 27 0624 55.85 19 19.74 155 13.49 9.01 36 7 .11 .4 .6 SF2 1.4X 166 5  
 2001 AUG 28 0509 29.54 19 57.44 155 32.45 31.66 25 5 .11 1.3 1.4 KEA 1.3X 242 21  
 2001 AUG 28 0816 39.66 19 21.05 155 12.90 7.20 40 8 .12 .5 .6 SF2 1.5X 157 3

2001 AUG 28 1002 38.94 20 6.74 155 47.69 24.10 22 2 .12 1.4 2.0 KOH 1.9X 121 2  
 2001 AUG 28 1136 38.52 19 20.48 155 12.37 5.41 29 3 .12 .6 1.2 SF2 1.4X 164 4  
 2001 AUG 28 1513 24.56 19 12.08 155 20.03 45.60 35 9 .11 .8 1.2 DEP 1.5X 179 8  
 2001 AUG 28 2213 32.46 19 14.82 155 31.91 10.68 23 3 .14 .5 1.3 LSW 1.3X 63 3  
 2001 AUG 28 2219 13.40 19 21.24 155 17.61 26.06 4513 .11 .6 .7 DEP 1.5X 114 4

2001 AUG 29 0027 39.62 19 50.14 155 33.87 15.90 32 8 .09 .7 2.2 KEA 1.3X 115 24  
 2001 AUG 29 0333 15.19 19 11.32 155 35.10 1.17 21 2 .12 .7 1.0 LSW 1.4X 155 11  
 2001 AUG 29 0405 47.17 19 22.49 155 29.60 9.70 19 2 .08 .4 1.0 KAO 1.2X 46 3  
 2001 AUG 29 1219 14.98 19 20.07 155 12.88 7.16 42 9 .13 .5 .7 SF2 1.4X 164 5  
 2001 AUG 29 1326 26.21 19 12.55 155 32.35 5.72 22 2 .12 .5 1.8 LSW 1.5X 131 6

2001 AUG 30 0142 7.40 19 24.31 155 18.81 16.01 16 5 .11 1.3 1.0 DEPL 1.9X 93 3  
 2001 AUG 30 0639 52.32 19 12.12 155 33.67 5.74 27 6 .17 .6 3.0 LSW 1.3X 90 8  
 2001 AUG 30 0648 22.61 19 25.91 155 23.33 9.31 36 8 .09 .3 .8 KAO 1.6X 51 7  
 2001 AUG 30 0856 3.47 19 20.09 155 49.35 5.45 39 9 .13 .4 .8 KON 2.5X 125 9  
 2001 AUG 30 1602 8.05 19 54.40 156 27.49 10.19 45 9 .13 1.1 2.3 DIS 2.7X 224 54

2001 AUG 30 1802 52.81 19 19.74 155 6.04 6.73 23 .14 1.0 1.5 SF4 1.3X 192 7  
 2001 AUG 30 1902 1.00 19 49.45 155 37.08 10.97 22 4 .15 .8 .9 KEA 1.4X 101 28  
 2001 AUG 31 0122 4.70 19 26.92 155 29.52 11.53 25 5 .12 .4 1.1 KAO 1.5X 56 7  
 2001 AUG 31 0427 59.14 19 20.76 155 8.01 8.60 39 5 .09 .7 .5 SF4 2.2X 173 4  
 2001 AUG 31 0822 13.33 19 56.59 155 17.24 8.18 17 3 .15 1.1 .7 KEA 1.4X 202 8

2001 AUG 31 0939 27.37 19 4.12 155 23.72 27.14 22 3 .12 1.5 1.1 LOI 1.6X 230 12  
 2001 AUG 31 2220 34.95 19 24.71 155 14.83 13.75 18 2 .13 1.3 .6 DEPL 1.6X 214 5  
 2001 AUG 31 2355 42.15 19 17.90 155 13.23 0.02 31 5 .13 .5 .4 SSF # 1.1X 174 9  
 2001 SEP 1 0645 4.72 19 16.13 155 28.98 9.66 35 4 .13 .4 .6 LSW 1.8X 60 3  
 2001 SEP 1 0824 0.47 19 32.36 155 55.76 12.94 15 3 .10 1.5 .6 KON 1.5X 232 19

2001 SEP 1 1046 26.22 19 20.02 155 4.53 5.30 27 3 .09 .8 1.7 SF5 1.9X 213 8  
 2001 SEP 1 1223 59.78 19 22.54 155 14.54 2.99 16 5 .07 .4 .3 SEC 1.3X 135 2  
 2001 SEP 1 1428 44.00 19 20.28 155 6.57 6.61 29 4 .11 .9 .8 SF4 2.0X 214 6  
 2001 SEP 1 2046 42.53 19 19.74 155 14.39 7.26 24 1 .14 .7 1.1 SF2 1.7X 170 6  
 2001 SEP 2 0440 36.86 19 29.15 155 26.45 4.26 27 6 .10 .3 1.7 KAO 1.6X 96 6

2001 SEP 2 0705 49.93 19 24.90 155 16.24 1.43 20 5 .08 .4 .2 SNCL 1.7X 173 1  
 2001 SEP 2 0830 15.76 20 6.74 155 32.23 35.19 28 4 .12 1.2 1.9 KEA 1.7X 224 25  
 2001 SEP 2 1433 4.84 19 18.45 155 14.93 6.02 29 4 .16 .8 1.2 SF1 1.5X 166 5  
 2001 SEP 3 0134 44.85 19 27.23 155 28.04 9.62 22 3 .11 .4 1.1 KAO 1.2X 46 9  
 2001 SEP 3 1552 55.65 18 46.97 155 1.02 49.69 21 2 .10 2.7 3.1 LOI 2.0X 315 63

2001 SEP 3 1927 31.90 19 15.60 155 25.06 8.77 26 3 .10 .4 .8 LSW 1.1X 74 3  
 2001 SEP 3 1930 27.69 19 34.73 155 58.82 10.19 21 3 .11 1.4 .6 KON 1.2X 256 19  
 2001 SEP 3 2035 11.72 19 17.04 155 45.38 10.32 34 5 .09 .6 .5 KON 1.6X 185 15  
 2001 SEP 4 0135 8.04 19 23.21 155 17.01 3.12 33 8 .12 .3 .2 SSC 2.0X 70 0  
 2001 SEP 4 0200 37.72 19 20.96 155 12.80 10.77 38 4 .11 .6 .4 SF2 2.7X 158 3

ORIGIN TIME (HST)												ORIGIN TIME (HST)																											
YEAR	MON	DA	HRM	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRM	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN		
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS

2001 SEP 4 0307 47.58 19 22.85 155 19.38 30.43 5415 .12 .5 .6 DMLF 3.2X 74 4  
 2001 SEP 4 0954 54.52 19 22.79 155 7.58 6.18 20 2 .12 .9 1.0 SF4 1.1X 178 1  
 2001 SEP 4 1356 38.21 19 24.88 155 38.05 2.77 3810 .13 .3 .3 MLO 2.2X 99 1  
 2001 SEP 4 1615 44.75 19 38.66 155 28.48 27.05 20 4 .09 .7 1.2 KEA 1.8X 116 4  
 2001 SEP 4 1709 1.00 19 22.47 155 2.44 8.27 22 2 .14 1.4 .5 SF5 1.1X 201 4

2001 SEP 4 1740 36.71 19 15.33 155 29.49 9.17 21 2 .16 .6 1.3 LSW 1.0X 83 1  
 2001 SEP 4 2146 34.36 19 52.17 155 24.02 27.84 37 9 .10 .6 1.1 KEA 1.5X 182 6  
 2001 SEP 4 2231 13.38 19 49.94 155 42.39 47.25 24 4 .11 1.0 1.5 KEA 1.6X 219 21  
 2001 SEP 5 0239 21.22 19 24.58 155 13.84 39.48 21 5 .14 1.5 1.1 DEP 1.7X 210 4  
 2001 SEP 5 0421 28.63 19 16.59 155 30.17 8.38 33 5 .15 .4 .9 LSW 1.6X 54 3

2001 SEP 5 0438 8.49 19 20.57 155 13.30 7.30 36 6 .11 .5 .6 SF2 1.3X 161 4  
 2001 SEP 5 0853 19.79 19 29.37 155 27.49 5.58 4110 .12 .3 1.2 KAO 2.0X 55 5  
 2001 SEP 5 0916 4.79 19 27.12 155 27.93 10.13 21 4 .09 .4 1.1 KAO 1.3X 56 9  
 2001 SEP 5 1143 37.19 19 18.08 155 1.33 8.69 19 4 .14 1.5 .6 SF5 1.4X 292 13  
 2001 SEP 5 1353 8.31 19 15.81 155 22.85 3.10 21 4 .10 .4 .9 SWR 1.2X 156 3

2001 SEP 5 1419 59.35 19 16.24 155 23.14 2.04 23 6 .11 .4 .7 SWR 1.2X 136 4  
 2001 SEP 5 1437 46.12 19 16.14 155 23.50 3.84 32 7 .14 .3 1.0 SWR 1.6X 127 3  
 2001 SEP 5 1443 15.63 19 16.61 155 23.34 1.71 19 1 .15 .4 1.1 SWR 1.3X 123 4  
 2001 SEP 5 1444 25.23 19 16.28 155 23.37 2.99 32 6 .15 .4 1.0 SWR 1.9X 129 4  
 2001 SEP 5 1603 42.17 19 54.33 155 33.87 3.53 17 4 .21 1.8 4.7 KEA 1.5X 223 18

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2001 SEP 5 1641 10.98 19 22.80 155 24.10 12.81 21 2 .09 .5 .8 KAO 1.2X 86 5  
 2001 SEP 5 1714 54.20 19 29.63 155 25.92 6.05 20 5 .15 .4 1.4 KAO 1.5X 74 5  
 2001 SEP 5 1813 47.96 19 23.73 155 19.23 10.22 22 4 .12 .7 1.0 KAOL 1.5X 62 4  
 2001 SEP 5 1858 37.43 19 29.29 155 6.09 38.93 27 3 .11 1.2 1.7 DEP 1.4X 128 10  
 2001 SEP 5 2117 0.26 19 22.54 155 30.04 11.31 25 5 .12 .5 1.1 KAO 1.1X 48 4

2001 SEP 5 2140 45.76 19 30.15 155 28.09 5.02 17 3 .09 .4 1.6 MLO 1.4X 82 3  
 2001 SEP 5 2216 5.12 19 44.90 155 50.35 30.98 23 3 .12 1.6 1.3 HUA 1.2X 265 7  
 2001 SEP 5 2235 4.35 19 16.18 155 23.61 2.61 30 6 .13 .3 .7 SWR 1.3X 123 3  
 2001 SEP 5 2349 35.11 19 31.49 155 42.44 6.46 34 9 .14 .5 1.3 MLO 1.7X 79 6  
 2001 SEP 6 0059 44.08 19 15.97 155 23.18 3.00 17 2 .12 .5 1.0 SWR 1.2X 141 3

2001 SEP 6 0104 20.39 19 16.24 155 23.50 3.19 18 3 .12 .4 1.0 SWR .9X 126 4  
 2001 SEP 6 0105 56.07 19 15.37 155 22.87 4.97 21 3 .11 .5 1.1 SWR 1.0X 162 3  
 2001 SEP 6 0122 10.80 19 16.02 155 23.10 3.32 18 4 .12 .5 1.1 SWR 1.1X 143 4  
 2001 SEP 6 0342 41.50 19 22.38 155 30.10 11.34 23 2 .10 .4 .9 KAO 1.3X 45 4  
 2001 SEP 6 0342 57.02 19 22.17 155 30.04 11.56 22 1 .10 .5 .8 KAO 1.1X 59 4

2001 SEP 6 0447 8.42 19 13.78 154 59.27 44.63 17 2 .10 2.6 2.8 DIS 1.3X 310 33  
 2001 SEP 6 0447 47.48 19 25.27 155 19.06 9.02 13 4 .09 .5 1.0 KAO 1.0X 124 3  
 2001 SEP 6 1248 1.83 19 19.40 155 14.83 6.93 37 8 .13 .4 .7 SF1 1.3X 163 5  
 2001 SEP 6 1524 52.01 19 22.32 155 18.63 32.14 23 5 .11 .9 1.4 DEP 1.5X 108 5  
 2001 SEP 6 1621 1.65 19 21.03 155 5.95 7.10 35 5 .12 .6 .7 SF4 1.7X 177 5

2001 SEP 6 2030 56.83 19 11.27 155 31.39 7.56 39 8 .15 .5 .7 LSW 1.7X 145 7  
 2001 SEP 6 2050 23.67 19 21.79 155 5.87 6.92 4712 .12 .4 .4 SF4 2.4X 168 4  
 2001 SEP 6 2051 58.86 19 23.66 155 6.22 4.69 13 1 .09 .8 .6 SMB 1.5X 164 3  
 2001 SEP 6 2115 6.99 19 19.61 155 5.41 2.60 17 4 .08 .7 .8 SSF 1.2X 215 8  
 2001 SEP 6 2121 44.93 19 20.07 155 5.62 5.17 23 1 .09 1.0 2.5 SF4 1.3X 200 7

ORIGIN TIME (HST)												ORIGIN TIME (HST)																											
YEAR	MON	DA	HRM	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRM	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN		
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS

2001 SEP 7 0502 24.11 19 20.34 155 12.62 6.62 23 3 .12 .7 .8 SF2 1.1X 185 4  
 2001 SEP 7 0601 36.75 19 11.94 155 26.83 8.14 14 2 .13 .9 .9 LSW 1.3X 155 5  
 2001 SEP 7 0625 37.54 19 26.88 155 29.90 11.95 17 4 .12 .6 1.3 KAO 1.0X 65 6  
 2001 SEP 7 0934 56.64 19 10.56 155 19.55 47.50 36 8 .11 1.0 1.3 DEPT 2.0X 217 10  
 2001 SEP 7 1005 44.09 19 18.76 155 15.30 8.72 37 6 .13 .5 .6 SF1 1.4X 166 4

2001 SEP 7 1039 29.81 19 27.33 155 15.99 23.76 28 4 .12 .9 1.1 DEP 1.4X 106 5  
 2001 SEP 7 1507 37.15 19 46.11 155 43.02 18.13 45 8 .13 .6 2.5 KEAF 3.3X 116 16  
 2001 SEP 7 1945 7.78 19 21.18 155 8.55 7.77 40 6 .14 .6 .5 SF4 1.7X 165 3  
 2001 SEP 8 0237 12.58 19 19.48 155 11.67 5.29 28 4 .13 .7 1.7 SF3 1.1X 191 6  
 2001 SEP 8 0312 10.37 19 23.55 155 15.37 3.30 16 5 .08 .4 .3 SEC 1.3X 139 2

2001 SEP 8 0353 4.46 19 12.64 155 27.59 1.16 27 5 .14 .4 .6 LSW 1.4X 122 6  
 2001 SEP 8 0523 30.50 19 19.90 155 8.71 5.48 29 2 .11 .7 1.3 SF4 1.2X 180 4  
 2001 SEP 8 1420 57.30 20 53.42 156 5.77 24.09 25 5 .10 1.5 2.8 DIS 2.5X 258 30  
 2001 SEP 8 1748 15.84 19 31.78 155 40.75 9.15 17 5 .13 .8 1.6 MLO 1.0X 170 9  
 2001 SEP 9 0712 12.43 19 25.65 155 28.91 11.33 22 3 .11 .5 1.0 KAO 1.6X 42 6

2001 SEP 9 0751 3.38 19 19.65 155 11.82 5.56 23 2 .11 .8 1.3 SF3 1.2X 199 6  
 2001 SEP 9 1133 23.91 19 14.89 155 32.81 7.47 36 5 .14 .4 1.0 LSW 2.2X 110 5  
 2001 SEP 9 1323 46.12 19 21.45 155 18.55 3.49 31 8 .12 .3 .8 SWR 1.6X 64 3  
 2001 SEP 9 1707 25.06 19 10.00 155 32.21 32.22 39 5 .07 .6 1.2 DLS 1.9X 118 8  
 2001 SEP 9 1722 58.38 19 9.17 155 32.68 35.47 27 5 .08 .8 1.3 DLS 1.4X 129 8

2001 SEP 9 1839 7.06 19 25.31 155 29.47 9.67 27 3 .12 .4 1.0 KAO 1.1X 41 6  
 2001 SEP 9 2035 21.13 19 18.57 155 14.88 2.60 19 1 .11 1.0 1.5 SSF .9X 192 7  
 2001 SEP 9 2122 29.79 20 2.00 157 23.80 6.95 27 .14 8.515.6 DIS - 2.6X 294131  
 2001 SEP 10 0232 46.28 19 14.02 156 23.79 32.58 38 7 .13 1.2 3.4 DIS 2.1X 300 67  
 2001 SEP 10 0822 51.42 19 20.82 155 48.39 9.30 26 5 .13 .9 .7 KON 1.5X 187 15

2001 SEP 10 1350 57.98 20 4.50 155 55.31 10.77 13 1 .11 1.8 .9 KOH 1.7X 200 13  
 2001 SEP 10 1352 28.06 18 53.76 155 15.90 13.27 35 7 .11 .9 1.0 LOI 2.5X 249 36  
 2001 SEP 10 1409 21.54 18 52.60 155 15.66 12.97 40 3 .12 1.3 1.5 LOIF 4.7X 253 38  
 2001 SEP 10 1433 6.31 18 53.28 155 15.01 12.55 45 9 .11 .9 1.0 LOI 3.0X 251 37  
 2001 SEP 10 1453 43.13 18 51.68 155 12.82 11.15 17 2 .13 2.1 1.2 LOI 1.9X 265 42

2001 SEP 10 1501 16.92 19 12.02 155 27.02 1.57 20 2 .12 .5 1.0 LSW 1.4X 145 5  
 2001 SEP 10 1509 26.85 18 50.68 155 13.53 11.99 29 5 .11 1.7 1.3 LOI 2.4X 293 43  
 2001 SEP 10 1543 56.69 19 6.95 155 26.67 45.23 21 3 .09 1.5 1.8 DLS 1.7X 285 5  
 2001 SEP 10 1554 44.68 18 51.06 155 14.64 12.05 44 9 .11 1.2 1.4 LOI 3.2X 259 41  
 2001 SEP 10 1601 0.80 18 52.04 155 14.53 11.95 41 7 .10 .8 .9 LOI 2.5X 255 40

2001 SEP 10 1623 7.94 18 47.75 155 14.97 13.89 29 5 .11 4.0 6.1 LOI 2.3X 282 46  
 2001 SEP 10 1629 11.38 18 51.80 155 12.31 10.81 18 3 .12 1.9 1.1 LOI 2.2X 292 43  
 2001 SEP 10 1632 9.31 18 49.29 155 14.25 11.16 19 2 .10 2.0 1.5 LOI 2.2X 279 44  
 2001 SEP 10 1653 4.96 19 23.73 155 29.69 10.19 25 5 .07 .4 .9 KAO 1.7X 44 4  
 2001 SEP 10 1723 50.29 18 52.57 155 13.43 11.35 20 2 .11 1.8 1.1 LOI 2.2X 259 40

2001 SEP 10 1740 6.72 18 53.43 155 16.09 13.71 23 .11 2.8 1.5 LOI 2.0X 257 36  
 2001 SEP 10 1805 11.12 18 51.32 155 10.47 10.01 20 3 .13 1.5 .9 LOI 2.1X 290 45  
 2001 SEP 10 1817 26.74 18 47.03 155 14.68 10.76 34 3 .13 1.7 1.8 LOI 2.3X 273 47  
 2001 SEP 10 1818 39.09 19 19.91 155 13.24 8.92 36 4 .11 .5 .6 SF2 1.9X 164 5  
 2001 SEP 10 1823 25.20 18 53.76 155 16.79 9.31 18 .14 2.2 1.1 LOI 1.5X 249 35

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	GAP	DS	REMARKS	KM	KM	MAG	
2001	SEP	10	1827	30.03	18	54.34	155	16.30	13.38	24	.13	2.1	1.2	LOI	2.0X	247	35									
2001	SEP	10	1829	6.89	18	53.12	155	14.72	12.61	4310	.12	.9	1.0	LOI	2.9X	252	38									
2001	SEP	10	1831	21.57	18	49.64	155	13.99	10.27	43	.9	.11	1.0	.8	LOI	2.8X	274	44								
2001	SEP	10	1832	15.12	18	48.88	155	14.18	10.53	4511	.13	1.1	1.2	LOI	3.3X	276	45									
2001	SEP	10	1833	31.44	18	53.51	155	14.83	12.58	4212	.11	.8	.9	LOI	2.9X	250	37									
2001	SEP	10	1843	20.24	18	53.38	155	15.01	12.56	45	7	.11	.9	.9	LOI	3.2X	251	37								
2001	SEP	10	1855	10.25	18	48.28	155	14.73	11.19	24	4	.10	1.4	1.2	LOI	2.2X	281	45								
2001	SEP	10	1858	11.56	19	19.17	155	12.80	8.92	21	5	.12	.8	1.1	SF2	1.5X	197	6								
2001	SEP	10	1900	39.69	19	21.17	155	13.33	7.93	36	6	.13	.5	.4	SF2	1.6X	156	3								
2001	SEP	10	1918	13.91	18	51.22	155	11.86	10.39	22	5	.13	1.5	.9	LOI	2.0X	275	44								
2001	SEP	10	1942	28.06	18	46.34	155	14.53	10.47	32	4	.15	1.6	1.5	LOI	2.1X	285	49								
2001	SEP	10	1948	11.73	18	57.65	155	20.47	20.76	12	.08	3.5	4.1	LOI	1.6X	265	25									
2001	SEP	10	1958	31.84	18	55.30	155	14.22	10.50	31	1	.11	1.4	.7	LOI	2.0X	245	35								
2001	SEP	10	2022	57.15	18	54.56	155	15.19	10.60	38	7	.12	1.1	.8	LOI	2.8X	247	35								
2001	SEP	10	2058	49.90	18	49.64	155	13.03	9.94	25	6	.14	1.2	.9	LOI	2.0X	266	45								
2001	SEP	10	2119	44.78	18	48.15	155	14.48	9.65	30	7	.13	1.1	.9	LOI	1.9X	271	46								
2001	SEP	10	2217	43.50	19	17.26	155	18.49	32.28	25	2	.10	.9	1.5	DEP	1.5X	162	1								
2001	SEP	10	2234	57.08	18	46.47	155	18.55	7.84	29	6	.15	1.3	.8	LOI	2.7X	274	44								
2001	SEP	11	0227	53.72	19	17.25	155	6.55	40.55	17	4	.09	1.2	1.1	DEP	1.5X	215	15								
2001	SEP	11	0319	40.74	18	54.11	155	16.04	12.51	32	7	.12	.9	.6	LOI	2.2X	247	35								
2001	SEP	11	0345	40.30	18	51.74	155	9.45	8.59	4412	.13	.9	.6	LOI	3.3X	259	46									
2001	SEP	11	0433	28.47	18	48.35	155	15.17	11.53	18	3	.09	1.5	1.1	LOI	2.2X	281	45								
2001	SEP	11	0457	46.33	19	20.30	155	5.37	6.64	31	4	.11	.6	.8	SF4	1.3X	182	7								
2001	SEP	11	0921	21.28	18	54.22	155	15.66	8.04	21	.13	2.8	1.0	LOI	1.8X	255	35									
2001	SEP	11	1034	14.17	18	44.94	155	10.09	8.70	21	3	.13	3.2	4.2	LOI	2.5X	291	55								
2001	SEP	11	1314	19.76	20	11.35	156	1.43	16.07	26	2	.11	1.0	5.1	KOH	2.3X	162	26								
2001	SEP	11	1446	55.50	19	10.25	155	36.43	6.07	29	6	.11	.5	1.0	LSW	1.8X	127	14								
2001	SEP	11	1728	23.37	19	20.70	155	8.20	6.26	30	5	.18	.9	1.0	SF4	1.5X	177	4								
2001	SEP	11	1825	41.56	18	54.63	155	15.61	8.14	21	3	.13	1.6	.8	LOI	2.3X	254	35								
2001	SEP	11	2141	58.09	18	54.22	155	16.21	13.46	33	6	.13	1.0	.8	LOI	2.2X	252	35								
2001	SEP	12	0420	54.74	19	28.31	155	26.58	5.25	26	6	.12	.3	2.5	KAO	1.3X	79	6								
2001	SEP	12	0451	24.43	19	46.35	155	42.52	19.71	20	4	.15	.9	3.2	KEA	1.5X	195	17								
2001	SEP	12	0454	29.13	18	52.50	155	18.37	8.84	18	2	.15	1.9	.9	LOI	1.7X	279	36								
2001	SEP	12	0658	8.07	19	24.54	155	37.98	1.38	27	7	.12	.3	.6	MLO	2.0X	96	6								
2001	SEP	12	1216	46.70	19	28.71	155	26.56	6.48	35	8	.12	.3	1.1	KAO	1.8X	48	6								
2001	SEP	12	1805	4.31	18	54.94	155	13.47	8.68	16	4	.12	1.8	.7	LOI	1.5X	284	37								
2001	SEP	12	1853	26.37	18	59.38	155	20.47	20.11	13	.11	3.3	3.6	LOI	1.7X	259	23									
2001	SEP	13	0311	45.35	18	50.61	155	15.15	11.91	35	4	.12	1.3	1.3	LOIF	4.9U	273	41								
2001	SEP	13	0320	11.48	18	54.51	155	14.99	13.06	22	1	.10	1.5	1.0	LOI	2.0X	252	36								
2001	SEP	13	0337	30.70	18	50.88	155	12.98	11.02	17	2	.09	2.0	1.2	LOI	2.0X	293	43								
2001	SEP	13	0416	47.97	18	53.28	155	12.54	10.80	15	4	.10	1.8	.9	LOI	1.6X	289	40								
2001	SEP	13	0439	46.33	18	53.60	155	15.11	12.54	34	3	.09	1.4	1.1	LOI	2.0X	254	37								
2001	SEP	13	0732	15.34	18	52.06	155	12.42	10.49	21	1	.10	2.2	.8	LOI	1.9X	264	42								
2001	SEP	13	0743	22.35	19	49.83	155	34.50	14.63	20	1	.10	1.2	.9	KEA	1.4X	193	25								
2001	SEP	13	0812	30.42	19	24.76	155	38.78	3.61	16	3	.12	.6	.6	MLO	1.2X	185	2								

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	GAP	DS	REMARKS	KM	KM	MAG	
2001	SEP	13	0814	32.04	19	20.02	155	10.44	9.00	14	2	.06	1.0	1.0	SF3	1.0X	218	4								
2001	SEP	13	0839	54.17	18	52.92	155	12.12	9.86	41	6	.16	1.5	1.1	LOI	4.4U	254	41								
2001	SEP	13	0859	33.94	18	53.47	155	10.18	9.75	15	2	.08	1.9	.9	LOI	1.7X	295	43								
2001	SEP	13	0914	24.20	18	52.18	155	10.45	10.96	20	4	.11	1.8	1.2	LOI	2.3X	326	44								
2001	SEP	13	0938	46.35	19	58.57	155	25.09	11.80	15	3	.11	.9	.4	KEA	1.6X	191	12								
2001	SEP	13	1022	38.04	19	19.40	155	24.31	8.47	17	3	.10	.5	1.1	SWR	1.4U	72	2								
2001	SEP	13	1122	25.77	19	19.40	155	12.33	5.27	21	2	.10	.8	1.5	SF2	1.2X	198	6								
2001	SEP	13	1249	21.16	18	54.52	155	13.16	12.57	41	9	.11	1.0	.7	LOI	2.3X	256	38								
2001	SEP	13	1306	18.11	19	57.79	155	29.54	37.76	23	6	.11	.8	1.3	KEA	1.5X	175	18								
2001	SEP	13	1842	36.75	18	48.89	155	14.36	11.46	31	6	.12	1.3	1.2	LOI	1.7X	283	45								
2001	SEP	14	0614	38.49	19	19.70	155	14.14	6.48	22	4	.12	.7	1.3	SF2	1.2U	182	6								
2001	SEP	14	1151	29.35	19	20.51	155	12.91	9.19	19	3	.10	.7	.6	DEP	1.4X	184	4								
2001	SEP	14	1549	24.05	19	29.30	155	46.90	9.27	27	7	.13	.6	.6	KON	1.5X	168	3								
2001	SEP	14	1744	33.42	18	52.50	155	14.10	10.09	37	8	.12	.9	.6	LOI	2.1X	261	40								
2001	SEP	14	1822	54.43</td																						

ORIGIN TIME (HST)											LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKs	MAG	RD	GAP	DS						

2001 SEP 17 2248 46.93 19 19.47 155 31.04 25.72 5317 .07 .4 .8 DML 2.6X 80 8  
 2001 SEP 18 0712 42.36 19 12.14 155 44.78 11.67 20 6 .10 .7 .6 KON 1.3X 156 6  
 2001 SEP 18 0719 28.81 19 26.68 155 18.48 7.51 20 6 .09 .6 .9 INT 1.3X 162 3  
 2001 SEP 18 0959 18.75 19 16.75 155 11.54 5.24 17 3 .09 1.3 3.5 SF3 1.4X 294 11  
 2001 SEP 18 1615 16.65 19 24.30 155 17.09 1.46 19 5 .13 .4 .2 SSC 1.6X 89 1

2001 SEP 18 1656 37.45 19 18.62 155 14.48 5.21 18 5 .10 .8 1.8 SF2 .9X 243 6  
 2001 SEP 18 1811 28.49 19 24.81 155 1.68 3.06 36 5 .13 .6 .8 SME 1.6X 156 4  
 2001 SEP 18 1842 47.33 19 1.55 155 21.24 18.50 15 .13 5.7 3.1 LOI 1.7X 276 19  
 2001 SEP 18 2253 41.85 19 22.43 155 18.54 31.53 24 7 .12 .7 .9 DEP 1.5X 93 5  
 2001 SEP 19 0213 46.28 19 28.16 155 51.93 13.60 19 2 .12 1.9 .6 KON 1.5X 264 11

2001 SEP 19 0217 20.75 19 38.82 155 39.80 12.88 16 3 .11 1.6 .8 KEA 1.0X 247 19  
 2001 SEP 19 0403 58.82 19 20.10 155 6.50 6.62 41 9 .11 .6 .7 SF4 1.5X 180 6  
 2001 SEP 19 0629 40.89 19 11.53 155 35.23 5.17 31 2 .17 .5 1.4 LSW 1.7X 94 11  
 2001 SEP 19 0728 58.89 19 53.90 155 47.23 19.11 22 6 .10 1.1 2.9 HUA 1.5X 257 24  
 2001 SEP 19 1123 38.73 19 20.63 155 8.11 8.83 34 5 .10 .8 .7 SF4 1.9X 193 4

2001 SEP 19 1320 30.23 19 19.45 155 8.48 6.63 26 3 .09 .8 .7 SF4 1.0X 222 5  
 2001 SEP 19 1657 13.11 19 45.78 156 10.22 37.83 45 8 .11 .9 1.9 HUA 2.5X 201 20  
 2001 SEP 19 2224 0.54 19 22.66 155 5.51 8.29 20 3 .06 .6 .4 SF4 1.0X 212 4  
 2001 SEP 20 0052 20.98 19 30.34 155 0.57 41.93 31 9 .11 .8 1.0 DEP 2.9X 96 10  
 2001 SEP 20 0859 17.53 19 46.76 155 24.52 19.38 28 6 .11 .8 1.5 KEA 1.5X 117 5

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2001 SEP 20 0942 42.75 19 28.70 155 53.54 11.97 34 5 .19 1.2 .6 KON 2.2X 214 14  
 2001 SEP 20 1000 19.58 19 10.24 155 25.38 38.87 21 4 .09 1.0 1.6 DLS 1.4X 216 5  
 2001 SEP 20 1207 24.98 19 22.71 155 3.25 7.75 20 2 .15 1.2 .7 SF5 1.4X 188 3  
 2001 SEP 20 1341 22.51 19 25.17 155 18.62 14.15 29 7 .08 .5 .6 DEP 1.4X 106 2  
 2001 SEP 20 1538 52.97 19 17.83 155 13.81 8.36 27 6 .11 .8 .8 SF2 1.2X 205 8

2001 SEP 20 2032 48.03 19 26.96 155 29.68 11.48 31 6 .11 .4 .8 KAO 1.5X 46 7  
 2001 SEP 20 2225 26.93 19 28.26 155 26.51 6.44 21 4 .13 .4 1.6 KAO .9X 51 6  
 2001 SEP 21 0210 39.76 20 0.26 155 55.80 9.92 17 3 .12 2.0 2.0 KOH 1.4X 324 36  
 2001 SEP 21 0214 49.24 19 20.72 155 6.93 8.15 40 8 .13 .7 .6 SF4 1.8X 188 5  
 2001 SEP 21 0240 32.53 19 20.04 155 6.37 6.44 23 4 .09 .7 .9 SF4 1.2X 217 6

2001 SEP 21 0330 49.94 19 10.61 155 41.37 0.42 15 2 .12 .7 .6 LSW .8X 159 8  
 2001 SEP 21 0817 16.23 19 20.72 155 6.65 6.71 31 6 .12 .6 .7 SF4 1.4X 192 5  
 2001 SEP 21 0919 8.27 19 58.21 156 14.78 39.31 29 4 .13 1.2 2.2 KOH 2.1X 201 52  
 2001 SEP 21 1024 31.88 18 54.43 155 10.28 17.29 24 3 .11 1.814.6 LOI - 1.8X 275 42  
 2001 SEP 21 1813 38.94 19 6.63 155 28.17 29.58 3811 .10 .6 1.0 DLS 1.6X 184 5

2001 SEP 21 2229 59.24 19 23.56 155 28.80 10.66 17 2 .10 .6 1.2 KAO 1.4X 60 3  
 2001 SEP 21 2348 43.58 19 21.53 155 7.99 6.41 30 2 .16 .9 .9 SF4 1.3X 176 3  
 2001 SEP 22 0328 18.37 19 20.77 155 13.56 7.77 33 6 .11 .4 .5 SF2 1.3X 171 4  
 2001 SEP 22 0443 1.17 19 21.30 155 23.66 9.11 15 4 .08 .6 .7 SWR .9X 122 2  
 2001 SEP 22 0941 31.85 19 6.16 155 32.52 6.71 13 1 .11 1.8 3.1 LSW 1.1X 281 10

2001 SEP 22 0952 12.26 19 19.22 155 6.86 7.80 33 5 .10 .7 .8 SF4 1.5X 212 7  
 2001 SEP 22 1232 53.37 19 19.08 155 14.89 7.49 33 3 .11 .6 .7 SF1 1.5X 171 5  
 2001 SEP 22 1915 32.33 19 21.68 155 11.52 7.25 28 3 .12 .5 .5 SF3 1.3X 163 3  
 2001 SEP 22 2148 35.92 19 29.58 155 59.52 11.88 15 .08 4.9 1.2 KON 1.3X 289 24  
 2001 SEP 22 2251 45.55 19 25.09 155 37.73 2.62 27 4 .12 .4 .4 MLO 2.3X 121 1

ORIGIN TIME (HST)											LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKs	MAG	RD	GAP	DS						

2001 SEP 23 0121 21.53 19 17.62 155 28.13 9.90 27 3 .14 .5 .8 LSW 2.1U 72 6  
 2001 SEP 23 0123 13.14 19 17.80 155 27.92 9.44 36 5 .13 .3 .6 LSW 1.4X 46 6  
 2001 SEP 23 0833 4.14 19 26.85 155 39.09 14.70 25 6 .11 .5 .3 DML 1.3X 99 5  
 2001 SEP 23 1039 11.38 18 54.85 155 15.06 13.12 14 .08 2.3 1.1 LOI 1.9X 253 35  
 2001 SEP 23 1154 11.56 20 1.74 155 11.90 33.95 14 4 .07 2.1 1.6 KEA 1.6X 317 22

2001 SEP 23 1736 35.61 19 21.08 155 12.16 8.74 38 5 .13 .6 .5 SF3 2.0X 159 3  
 2001 SEP 23 2016 36.71 19 27.08 154 53.10 8.36 16 3 .08 .9 .5 LER 1.9X 168 3  
 2001 SEP 23 2215 3.20 19 45.48 155 28.14 13.94 23 6 .12 .6 .3 KEA 1.2X 124 3  
 2001 SEP 24 0230 14.02 18 48.27 155 14.66 10.17 21 3 .07 1.4 .8 LOI 1.7X 281 46  
 2001 SEP 24 0824 36.99 19 20.61 155 8.15 7.23 33 4 .12 .6 .7 SF4 1.4X 177 4

2001 SEP 24 1458 57.05 19 48.93 155 56.67 31.18 22 4 .12 1.6 1.9 HUA 1.5X 310 18  
 2001 SEP 24 2309 28.52 19 21.70 155 8.45 7.37 34 1 .13 .5 .5 SF4 1.8X 167 3  
 2001 SEP 25 0000 51.63 19 15.20 155 28.24 10.65 17 2 .09 .5 .8 LSW 1.5X 75 3  
 2001 SEP 25 0818 58.27 19 23.70 155 27.10 10.17 22 5 .11 .4 .9 KAO 1.3X 66 2  
 2001 SEP 25 1232 5.37 19 19.75 155 10.03 7.91 32 4 .10 .6 .7 SF3 1.6X 176 4

2001 SEP 25 1313 11.95 19 17.07 155 27.62 12.64 19 4 .08 .5 .9 LSW 1.2X 54 6  
 2001 SEP 25 1431 5.81 19 18.95 155 13.12 8.69 29 2 .12 .8 .9 SF2 1.9X 180 7  
 2001 SEP 25 2126 59.98 19 20.89 155 9.57 8.20 35 3 .12 .6 .7 SF3 1.4X 168 2  
 2001 SEP 25 2156 15.35 19 35.33 155 53.76 15.87 25 6 .15 1.2 1.1 KON 1.8X 174 16  
 2001 SEP 25 2307 4.40 19 22.04 155 26.72 10.99 25 6 .11 .4 .8 KAO 1.3X 49 2

2001 SEP 25 2338 4.45 19 22.48 155 25.29 12.25 41 8 .12 .4 .6 KAO 1.4X 35 4  
 2001 SEP 26 0303 20.18 19 12.47 155 32.97 7.79 20 4 .12 .6 .9 LSW 1.2X 135 7  
 2001 SEP 26 0517 17.31 18 54.15 155 15.63 12.97 39 6 .09 1.1 .9 LOI 2.5X 249 36  
 2001 SEP 26 0817 54.95 19 31.71 155 18.68 32.78 20 5 .09 .9 1.4 DEP 1.2X 135 9  
 2001 SEP 26 0917 22.74 19 16.01 155 27.45 11.10 25 2 .09 .4 .8 LSW 1.6X 67 5

2001 SEP 26 1447 57.68 19 21.63 155 30.47 12.33 22 3 .10 .4 1.1 KAO 1.4X 62 5  
 2001 SEP 26 2239 15.30 18 46.45 155 13.71 10.51 28 5 .12 1.4 1.5 LOI 2.2X 284 49  
 2001 SEP 27 0314 58.12 19 8.18 155 30.97 6.94 14 1 .08 1.4 2.0 LSW 1.3X 210 6  
 2001 SEP 27 0731 59.26 19 21.26 155 30.26 10.11 15 3 .04 .4 1.0 KAO 1.2X 94 5  
 2001 SEP 27 1149 49.76 19 23.98 155 15.81 3.12 32 6 .09 .2 .2 SEC 1.9X 67 1

2001 SEP 27 1229 32.05 19 23.86 155 15.62 2.90 19 4 .08 .3 .3 SEC 1.7X 102 2  
 2001 SEP 27 1529 38.75 19 8.93 155 36.64 11.82 23 4 .11 .6 .9 LSW 1.2X 186 15  
 2001 SEP 27 2052 32.61 19 24.52 155 19.87 3.85 13 1 .07 .7 1.8 KAO .9X 81 4  
 2001 SEP 27 2354 16.69 19 44.36 155 38.36 3.04 13 1 .10 .6 2.5 KEA 1.5X 166 22  
 2001 SEP 28 0359 57.14 19 19.58 155 12.93 5.94 33 6 .14 .5 1.0 SF2 1.2X 168 6

2001 SEP 28 0404 47.94 19 49.14 155 12.40 31.67 26 9 .12 1.4 2.5 HUA 1.9X 297 41  
 2001 SEP 28 0413 38.03 19 10.49 155 25.00 39.28 40 8 .10 .7 1.1 DEP 1.7X 172 5  
 2001 SEP 28 0749 13.69 19 23.02 155 14.58 28.27 19 7 .09 1.2 .8 DEP 1.2X 253 16  
 2001 SEP 28 1509 34.77 19 25.07 155 18.92 7.14 27 7 .12 .5 .9 INT 1.3X 78 2  
 2001 SEP 28 1827 42.13 20 16.29 155 44.07 30.06 5817 .09 .7 1.4 KOHF 2.9X 168 17

2001 SEP 28 1922 6.55 19 19.24 155 16.39 35.12 35 6 .10 .8 1.1 DEP 1.8X 158 5  
 2001 SEP 29 0315 10.64 19 21.54 155 4.93 8.93 39 9 .07 .5 .3 SF5 1.8X 184 5  
 2001 SEP 29 0711 50.57 19 45.53 155 19.99 12.92 29 8 .10 .5 .4 KEA 1.4X 105 13  
 2001 SEP 29 1807 37.82 19 20.28 155 11.80 6.40 31 3 .12 .7 1.0 SF3 1.3X 175 5  
 2001 SEP 29 1849 54.33 19 10.55 155 19.11 33.38 37 6 .10 .8 1.4 DEP 1.4X 188 11

ORIGIN TIME (HST)												PREF	N	AZ	MIN									
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	RD	S	SEC	KM	RD	REMKs	MAG	RD	GAP	DS
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS						

2001 SEP 29 2030 34.97 19 19.99 155 11.34 7.17 28 3 .12 .7 .8 SF3 1.0X 191 5  
 2001 SEP 29 2320 21.55 19 19.41 155 6.82 7.33 30 7 .12 .8 .7 SF4 1.3X 210 7  
 2001 SEP 30 0632 47.82 19 6.34 155 26.32 41.21 20 2 .10 1.2 2.3 DLS 2.7X 209 6  
 2001 SEP 30 0904 51.80 19 40.80 156 8.59 35.39 24 3 .10 1.9 2.8 HUA 1.9X 306 44  
 2001 SEP 30 2040 21.76 19 4.80 155 25.90 33.77 30 6 .09 .9 1.4 DLS 1.8X 196 9

2001 SEP 30 2145 20.66 19 39.48 156 9.83 33.67 32 6 .12 1.3 2.3 HUA 2.0X 205 34  
 2001 OCT 1 0035 44.52 19 19.28 155 13.09 8.30 27 2 .11 .7 .8 SF2 1.4X 179 6  
 2001 OCT 1 1408 50.00 19 20.78 155 12.49 7.70 28 1 .13 .6 .9 SF2 1.5X 171 4  
 2001 OCT 1 1446 28.20 19 16.33 155 26.81 1.14 21 2 .15 .4 1.0 LSW 1.0X 63 6  
 2001 OCT 1 1515 45.52 19 22.53 155 14.21 3.19 19 4 .06 .3 .3 SEC 1.6X 127 2

2001 OCT 1 1521 27.75 19 19.40 155 12.87 5.88 23 6 .12 .8 1.4 SF2 1.0X 210 6  
 2001 OCT 1 1613 30.46 19 21.61 155 30.62 10.41 20 4 .07 .4 1.0 KAO .9X 94 6  
 2001 OCT 1 1718 44.35 19 47.62 155 33.94 11.77 18 4 .09 .6 1.1 KEA 1.2X 177 22  
 2001 OCT 1 1729 33.31 19 17.44 155 22.72 35.93 23 5 .12 1.0 1.6 DEP 1.4X 120 5  
 2001 OCT 1 1950 49.95 19 24.45 155 30.35 9.59 32 6 .12 .3 .9 KAO 1.4X 41 6

2001 OCT 1 1952 42.07 19 24.48 155 30.12 10.73 21 4 .09 .4 1.0 KAO 1.3X 46 6  
 2001 OCT 2 0420 14.40 19 20.06 155 10.54 3.25 27 5 .17 .7 1.4 SSF 1.0X 181 4  
 2001 OCT 2 0524 28.63 19 28.41 155 15.71 32.38 26 7 .10 .7 1.0 DEP 1.4X 118 6  
 2001 OCT 2 0604 38.71 19 23.40 155 2.40 8.22 34 5 .13 .8 .5 SF5 1.4X 172 3  
 2001 OCT 2 1247 40.96 19 31.23 155 1.22 37.66 31 6 .11 1.1 1.0 DEP 1.5X 175 12

2001 OCT 2 1304 39.87 19 29.84 155 28.15 5.94 16 4 .09 .4 1.4 KAO 1.6X 78 4  
 2001 OCT 2 2237 23.25 19 17.95 155 14.83 8.38 36 2 .12 .5 .7 SF1 1.5X 165 7  
 2001 OCT 2 2259 27.75 19 13.52 155 27.66 8.96 30 8 .11 .4 .7 LSW 1.3X 107 5  
 2001 OCT 3 0212 17.05 19 32.60 156 3.28 8.52 21 4 .15 1.4 .7 KON 1.3X 270 28  
 2001 OCT 3 0519 32.00 19 10.87 155 26.16 35.23 19 5 .06 1.1 1.9 DLS 1.3X 185 4

2001 OCT 3 0626 32.75 19 11.45 155 16.33 45.23 24 4 .09 1.0 1.6 DEP 1.5X 191 13  
 2001 OCT 3 0910 44.11 19 0.16 155 25.65 40.76 16 2 .09 1.4 2.0 DLS 1.6X 244 18  
 2001 OCT 3 1312 2.32 19 10.40 155 32.42 8.48 35 6 .14 .7 .8 LSW 1.6X 164 8  
 2001 OCT 3 1336 14.26 19 51.13 155 4.53 31.82 18 2 .12 1.6 1.9 KEA 1.6X 244 17  
 2001 OCT 3 1848 50.63 19 21.16 155 8.55 7.27 39 4 .13 .7 .6 SF4 2.0X 169 3

2001 OCT 3 1938 7.85 19 22.39 155 9.57 5.90 30 4 .13 .5 .7 SF3 1.3X 145 1  
 2001 OCT 3 2004 9.58 19 19.10 155 14.14 0.03 35 6 .18 .3 .4 SSF # 1.4X 165 7  
 2001 OCT 3 2014 37.03 19 18.54 155 13.63 8.19 17 1 .12 1.4 1.0 SF2 1.0X 215 8  
 2001 OCT 4 0024 5.78 19 17.99 155 23.15 2.70 21 3 .11 .3 .7 SWR 1.0X 103 4  
 2001 OCT 4 0046 4.64 19 11.90 155 27.52 0.44 17 4 .13 .4 .6 LSW 1.1X 134 4

2001 OCT 4 0110 32.47 19 17.74 155 27.36 11.08 26 4 .13 .4 .9 LSW 1.2X 49 7  
 2001 OCT 4 0339 1.79 19 18.66 155 13.06 5.47 21 3 .14 .7 2.3 SF2 1.0X 201 7  
 2001 OCT 4 0524 11.81 19 1.57 155 25.24 44.30 22 3 .10 1.7 1.9 DLS 1.2X 237 15  
 2001 OCT 4 1147 41.24 19 15.42 155 25.24 10.18 22 4 .14 .5 1.0 LSW 1.2X 70 3  
 2001 OCT 4 1213 4.03 19 24.58 155 29.16 11.33 23 6 .09 .4 .9 KAO 1.4X 68 5

2001 OCT 4 1731 50.28 19 23.88 155 26.30 6.72 29 4 .11 .3 .9 KAO 1.5X 37 3  
 2001 OCT 4 1853 44.55 19 20.81 155 8.94 8.73 36 2 .10 .7 .6 SF4 1.9X 170 3  
 2001 OCT 4 1903 56.96 19 49.49 155 33.52 23.60 3912 10 .5 1.5 KEA 2.1U 106 12  
 2001 OCT 4 2253 23.67 19 9.88 155 41.08 0.82 20 2 .17 .5 .9 LSW 1.5X 88 9  
 2001 OCT 5 0339 5.74 19 15.14 155 17.70 1.58 35 4 .13 .5 .9 SWR 1.9X 170 5

ORIGIN TIME (HST)												PREF	N	AZ	MIN									
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	RD	S	SEC	KM	RD	REMKs	MAG	RD	GAP	DS
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS						

2001 OCT 5 0438 5.51 19 22.16 155 10.67 3.50 21 4 .08 .7 .4 SER 1.6X 143 1  
 2001 OCT 5 1806 0.57 19 20.49 155 8.58 8.88 39 7 .12 .7 .6 SF4 2.0X 185 4  
 2001 OCT 5 1810 52.40 19 20.97 155 8.17 8.04 4310 13 .5 .5 SF4 2.1X 174 4  
 2001 OCT 5 1959 51.15 19 20.52 155 10.77 7.50 30 3 .13 .6 .7 SF3 1.5X 180 3  
 2001 OCT 6 0122 42.12 18 51.80 155 11.42 47.71 20 1 .10 3.0 2.8 LOI 2.0X 266 44

2001 OCT 6 0820 2.17 19 53.92 156 32.37 5.20 20 3 .12 2.2 3.4 DIS 1.7X 234 77  
 2001 OCT 6 1334 51.92 19 26.19 155 22.49 9.45 17 6 .09 .4 1.0 KAO .9X 49 4  
 2001 OCT 6 2113 33.29 19 20.61 155 13.64 7.02 21 1 .11 .7 1.0 SF2 1.2X 174 4  
 2001 OCT 7 0339 31.43 19 48.04 156 1.62 10.47 25 3 .09 1.3 .7 HUA 1.9X 182 23  
 2001 OCT 7 1058 34.05 19 10.94 155 32.68 6.90 16 2 .10 .8 1.9 LSW 1.5X 156 9

2001 OCT 7 1516 39.19 19 13.66 155 28.58 37.89 25 3 .08 .9 1.7 DLS 1.5X 174 4  
 2001 OCT 7 1945 54.02 19 22.50 155 11.50 5.57 31 6 .13 .5 .7 SF3 1.3X 131 3  
 2001 OCT 7 2121 57.62 19 22.35 155 53.13 8.38 17 3 .20 1.6 2.7 KON 1.0X 247 20  
 2001 OCT 7 2222 54.02 19 20.62 155 8.48 7.66 25 2 .09 .7 .6 SF4 1.3X 189 4  
 2001 OCT 7 2350 27.15 19 33.31 156 28.83 3.83 32 7 .13 2.0 2.2 DIS 2.3X 238 69

2001 OCT 8 0025 9.49 19 45.32 155 21.64 28.75 18 5 .18 1.8 2.3 KEA 1.3X 170 15  
 2001 OCT 8 0518 30.90 19 31.52 155 43.39 6.46 18 5 .12 .6 1.4 KON 1.0X 103 5  
 2001 OCT 8 0708 14.89 18 53.30 155 12.71 3.90 19 4 .15 1.3 1.0 LOI 1.7X 261 44  
 2001 OCT 8 1227 40.52 19 13.42 155 27.09 5.26 28 3 .16 .4 1.2 LSW 1.2X 119 6  
 2001 OCT 8 1304 29.23 19 20.79 155 12.95 8.72 33 5 .11 .6 .4 SF2 1.5X 173 3

2001 OCT 8 1318 55.43 19 8.32 155 24.37 45.37 25 2 .10 1.2 1.9 LOI 1.6X 223 7  
 2001 OCT 8 1351 53.32 20 1.08 156 5.47 49.80 26 6 .12 1.2 2.9 KOH 2.0X 175 66  
 2001 OCT 9 0353 49.58 19 24.33 155 17.04 1.57 15 6 .09 .3 .2 SSC 1.4X 98 1  
 2001 OCT 9 0741 48.61 19 30.44 155 26.25 6.30 15 5 .12 .5 1.4 MLO 1.0X 126 4  
 2001 OCT 9 0958 48.88 19 20.15 155 14.86 8.23 47 8 .12 .3 .4 SF1 1.9X 158 4

2001 OCT 9 1903 48.80 19 10.62 155 25.08 39.07 4811 .09 .6 .9 DLS 2.1X 169 5  
 2001 OCT 9 1944 42.96 18 47.75 155 15.32 24.29 15 2 .11 2.9 7.1 LOI 1.5X 331 46  
 2001 OCT 9 2012 12.97 19 20.14 155 6.51 7.58 32 6 .09 .7 .6 SF4 1.6X 205 6  
 2001 OCT 9 2205 26.13 19 24.87 155 19.40 4.98 29 6 .09 .3 1.0 KAO 1.3X 47 3  
 2001 OCT 10 0400 42.08 19 53.84 155 19.96 9.86 12 2 .12 1.6 .7 KEA 1.2X 313 1

2001 OCT 10 0749 55.87 19 25.74 155 19.00 6.24 35 9 .11 .4 .7 INT 2.0X 47 3  
 2001 OCT 10 1233 6.31 19 19.21 155 15.36 5.45 25 4 .13 .8 1.3 SF1 1.0X 179 4  
 2001 OCT 10 1247 5.17 19 29.22 155 26.76 7.14 20 6 .10 .4 1.3 KAO 1.3X 96 5  
 2001 OCT 10 1402 36.42 19 21.39 155 12.78 2.09 17 4 .11 .5 .5 SER 1.4X 163 2  
 2001 OCT 10 2201 36.33 19 5.59 155 21.34 41.74 39 9 .08 .8 1.2 LOI 1.4X 202 14

2001 OCT 11 0112 29.95 19 25.96 155 14.14 28.22 34 9 .12 .8 1.0 DEP 1.2X 92 2  
 2001 OCT 11 0325 53.80 19 22.13 155 13.59 11.53 27 5 .10 .6 .4 SF2 1.1X 139 1  
 2001 OCT 11 0841 22.54 19 58.40 155 18.87 11.13 24 2 .13 1.5 .5 KEA 1.8X 189 8  
 2001 OCT 11 0906 41.17 19 57.25 155 17.35 10.80 15 3 .16 1.7 .7 KEA 1.4X 290 9  
 2001 OCT 11 1303 32.24 19 17.35 155 29.43 7.43 17 4 .08 .4 .9 LSW 1.0X 77 4

2001 OCT 11 1347 50.39 19 19.95 155 13.76 8.04 41 5 .13 .4 .5 SF2 1.9X 160 5  
 2001 OCT 11 1415 32.89 19 14.24 155 15.56 38.61 24 1 .07 1.2 2.0 DEP 1.4X 216 9  
 2001 OCT 11 1610 43.78 19 20.40 155 7.12 5.72 38 7 .14 .6 .9 SF4 1.5X 195 5  
 2001 OCT 11 1623 36.47 19 19.71 155 13.31 4.69 18 3 .12 .9 2.4 SSF 1.0X 197 5  
 2001 OCT 11 1826 5.91 19 58.61 155 9.86 0.01 19 4 .15 2.3 .7 KEA # 1.4X 302 21

ORIGIN TIME (HST)		LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN			
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS
2001	OCT	11	2012	23.23	19	39.04	156	26.30	5.26	30	6	.14	1.4	2.3	DIS	1.8X	235	63
2001	OCT	11	2042	57.02	19	28.82	155	26.66	6.21	26	6	.14	.4	1.6	KAO	1.1X	74	6
2001	OCT	11	2251	45.24	19	17.64	155	13.74	6.62	21	2	.11	.8	1.7	SF2	1.0X	216	9
2001	OCT	11	2256	27.10	19	18.86	155	6.67	3.93	25	4	.12	.8	2.8	SSF	1.2X	215	8
2001	OCT	12	0046	18.21	19	21.52	155	2.47	6.01	26	3	.15	1.2	1.0	SF5	1.3X	219	6
2001	OCT	12	0110	15.47	19	22.10	155	2.57	6.83	25	1	.11	1.1	.7	SF5	1.2X	198	5
2001	OCT	12	0319	58.62	19	17.17	155	25.91	6.09	17	2	.10	.4	1.7	LSW	1.0X	64	6
2001	OCT	12	0352	10.91	19	20.44	155	12.32	9.86	20	2	.06	.9	.5	SF2	1.2X	179	4
2001	OCT	12	0537	44.97	19	58.26	155	30.35	38.30	31	7	.12	.9	1.4	KEA	1.8X	175	19
2001	OCT	12	0634	49.03	19	23.04	155	14.46	1.63	16	3	.08	.3	.3	SEC	1.7X	111	3
2001	OCT	12	0746	37.99	19	23.80	155	15.33	1.42	17	4	.07	.2	.4	SEC	1.5X	104	2
2001	OCT	12	1320	44.45	19	19.33	155	10.02	6.90	27	2	.09	.6	.8	SF3	1.5X	200	5
2001	OCT	12	2344	41.27	19	27.37	155	29.71	11.44	39	7	.11	.4	.5	KAO	1.8X	48	9
2001	OCT	13	0337	44.82	19	20.27	155	7.39	9.50	4813	.11	.5	.4	.4	SF4	2.5X	172	5
2001	OCT	13	0338	19.14	19	20.57	155	7.80	8.30	4813	.13	.4	.4	.4	SF4	2.8X	169	5
2001	OCT	13	0508	25.61	19	21.18	155	27.28	11.16	20	5	.09	.4	.8	KAO	1.2X	60	3
2001	OCT	13	0908	43.48	19	19.43	155	13.04	8.85	23	1	.11	.8	.8	SF2	1.2X	192	6
2001	OCT	13	0948	28.11	19	21.14	155	29.91	10.36	24	1	.12	.5	1.1	KAO	1.3X	50	5
2001	OCT	13	1601	14.78	19	19.65	155	10.31	7.86	31	5	.12	.7	.6	SF3	1.6X	195	5
2001	OCT	13	1707	40.90	19	23.57	155	29.89	10.44	23	1	.07	.4	1.0	KAO	1.4X	45	4
2001	OCT	13	1826	43.09	19	55.37	155	49.91	43.29	43	9	.10	.8	1.2	KOH	2.2X	146	23
2001	OCT	13	1953	12.48	19	24.38	155	2.05	7.58	22	1	.10	.8	.6	SF5	1.1X	169	4
2001	OCT	14	0113	1.56	18	53.61	155	15.14	12.68	33	3	.11	1.5	1.3	LOI	2.0X	254	37
2001	OCT	14	0440	31.92	19	15.51	155	25.84	8.79	36	4	.14	.4	.9	LSW	1.7X	74	4
2001	OCT	14	0504	21.98	19	22.65	155	2.41	6.72	24	2	.15	1.2	1.0	SF5	1.4X	198	4
2001	OCT	14	0630	35.21	19	15.27	155	17.81	32.61	19	3	.11	1.5	1.4	DEP	1.2X	225	5
2001	OCT	14	0816	25.01	20	8.26	155	47.26	23.63	37	7	.11	.9	1.1	KOH	2.4X	160	1
2001	OCT	14	0904	12.73	19	35.76	155	57.31	35.61	22	5	.10	1.7	1.0	KON	1.5X	326	22
2001	OCT	14	1639	29.54	19	0.18	155	10.46	13.93	23	2	.13	2.5	1.5	LOI	1.6X	273	35
2001	OCT	14	2033	51.46	19	17.97	155	23.17	2.64	21	3	.14	.4	.9	SWR	1.1X	103	4
2001	OCT	14	2230	59.20	19	11.18	155	28.15	7.35	35	6	.15	.5	.6	LSW	1.8X	143	3
2001	OCT	15	0225	55.66	19	20.11	155	12.12	5.45	20	2	.13	.8	1.7	SF3	.9X	191	5
2001	OCT	15	0249	26.72	19	18.96	155	13.15	8.05	35	3	.13	.5	.6	SF2	1.6X	169	7
2001	OCT	15	0324	40.98	19	11.71	155	37.95	3.54	20	3	.14	.5	2.7	LSW	1.2X	87	15
2001	OCT	15	1546	7.30	19	22.15	155	17.40	2.16	14	4	.10	.3	.5	SSC	1.1X	96	2
2001	OCT	15	1724	16.96	19	21.04	155	11.70	6.69	29	3	.10	.6	.6	SF3	1.2X	170	4
2001	OCT	15	1830	10.13	19	21.51	155	7.89	7.51	41	6	.12	.6	.7	SF4	1.9X	169	3
2001	OCT	15	1923	5.88	19	21.35	155	16.53	28.18	38	8	.11	.7	.9	DEP	1.5X	128	2
2001	OCT	15	2043	44.78	19	23.24	155	30.88	9.98	23	4	.10	.4	.9	KAO	1.1X	52	6
2001	OCT	15	2122	31.47	19	27.80	155	27.83	10.28	40	7	.11	.3	.7	KAO	1.7X	48	8
2001	OCT	16	0636	31.11	19	20.00	155	10.44	7.54	27	4	.10	.6	.7	SF3	1.1X	191	4
2001	OCT	16	0852	2.35	18	50.09	155	20.04	42.74	21	4	.07	1.8	2.3	LOI	1.6X	302	45
2001	OCT	16	1936	26.65	19	24.09	155	26.49	8.68	37	8	.13	.3	.9	KAO	1.3X	33	4
2001	OCT	16	2218	18.58	19	4.13	155	18.33	45.45	3510	.09	.9	1.1	LOI	1.6X	215	19	
2001	OCT	16	2331	45.98	19	23.11	155	28.18	9.43	25	4	.12	.4	.8	KAO	1.1X	38	1

ORIGIN TIME (HST)		LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN			
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS
2001	OCT	17	0032	35.23	19	5.79	155	28.69	32.02	22	5	.10	1.2	1.2	DLS	1.3X	244	7
2001	OCT	17	0133	43.23	19	21.87	155	4.43	7.33	25	3	.14	.9	.7	SF5	1.0X	196	5
2001	OCT	17	0135	38.26	19	31.98	156	38.75	0.57	23	6	.13	3.1	.8	DIS	1.7X	257	93
2001	OCT	17	0240	53.65	19	16.81	155	30.63	8.15	28	4	.13	.4	1.1	LSW	1.3X	79	3
2001	OCT	17	0703	8.78	19	16.05	155	14.97	7.85	18	3	.10	.9	.9	SF1	1.0X	225	7
2001	OCT	17	0940	1.14	19	2.73	155	22.33	34.97	20	3	.09	1.4	1.5	LOI	1.7X	275	16
2001	OCT	17	1043	34.84	19	13.29	155	22.89	35.93	37	8	.11	.7	1.1	DEP	1.7X	174	3
2001	OCT	17	1110	9.62	19	21.83	155	18.24	27.31	16	3	.11	1.6	1.8	DEP	1.1X	97	4
2001	OCT	17	1322	50.27	19	10.30	155	28.58	35.67	27	7	.10	.8	1.4	DLS	1.4X	127	2
2001	OCT	17	1332	26.03	19	28.96	155	27.58	7.30	20	6	.09	.4	1.4	KAO	1.2X	79	6
2001	OCT	17	1816	28.65	19	10.73	154	59.08	29.86	5115	.13	.8	1.4	DIS	2.2X	230	27	
2001	OCT	17	1924	14.52	19	23.83	155	26.77	10.04	19	5	.13	.4	1.1	KAO	1.0X	71	3
2001	OCT	17	2340	45.72	19	23.02	155	30.01	10.98	22	3	.07	.4	.9	KAO	1.1X	49	4
2001	OCT	17	2356	26.39	19	23.12	155	10.23	2.38	11	1	.06	.8	.6	SER	1.2X	99	2
2001	OCT	18	0340	57.87	19	29.09	155	26.54	10.05	20	4	.08	.3	.9	KAO	1.1X	78	6
2001	OCT	18	0449	59.35	19	30.35	155	27.27	5.38	17	5	.11	.4	1.2	MLO	1.5X	110	3
2001	OCT	18	0608	33.97	19	19.55	155	13.48	4.32	14	3	.11	.7	2.5	SSF	.7X	198	6
2001	OCT	18	1147	52.22	19	20.45	155	9.75	7.25	27	5	.11	.9	.7	SF3	1.3X	200	3
2001	OCT	18	1348	23.30	19	25.54	155	29.58	9.87	36	6	.10	.3	.7	KAO	1.8X	41	7
2001	OCT	18	1535	3.10	19	16.85	155	34.76	5.04	29	7	.12	.3	2.4	LSW	1.3X	78	9
2001	OCT	18	2238	4.28	19	11.06	155	30.73	12.59	22	5	.13	.9	.4	LSW	1.3X	201	6
2001	OCT	19	0440	23.63	19	22.65	155	30.03	8.42	24	4	.11	.4	1.0	KAO	1.2X	48	4
2001	OCT	19	0553	5.88	19	16.09	155	29.99	7.77	20	4	.20	.6	1.3	LSW	.9X	58	2
2001	OCT	19	1128	27.98	19	17.75	155	23.54	4.72	24	5	.12	.5	1.8	SWR	1.2X	101	5
2001	OCT	19	1348	18.30	19	24.19	155	2.85	5.84	19	2	.13	.8	1.0	SF5	1.3X	168	2
2001	OCT	19	1357	7.76	19	17.89	155	22.97	3.09	17	1	.09	.4	.9	SWR	1.2U	108	4
2001	OCT	19	2027	19.09	19	18.99	155											

YEAR	MON	DAY	HR	MIN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	GAP	DS
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2001 OCT 22 1555 41.33 19 25.34 155 15.82 2.32 10 4 .08 .9 .5 SNCL 1.9X 245 2  
 2001 OCT 22 1855 31.81 19 16.61 155 27.67 12.05 19 4 .16 .6 1.2 LSW .9X 114 5  
 2001 OCT 22 2006 55.68 19 22.16 155 41.63 29.41 24 6 .09 .7 1.3 DML 1.2X 137 3  
 2001 OCT 22 2131 36.76 19 26.89 155 28.52 9.79 24 5 .10 .3 1.1 KAO 1.1X 51 8  
 2001 OCT 23 0216 12.93 19 21.14 155 8.22 6.87 28 5 .13 .9 .8 SF4 1.0X 180 3

2001 OCT 23 0334 20.37 19 22.14 155 10.53 6.24 19 3 .12 .8 .9 SF3 .9X 143 1  
 2001 OCT 23 0345 43.83 19 41.22 155 13.83 40.56 4310 .11 .6 1.1 KEA 1.9X 112 21  
 2001 OCT 23 0423 6.74 19 21.73 155 4.82 6.53 19 3 .11 1.0 .8 SF5 1.3X 211 5  
 2001 OCT 23 0730 41.70 19 46.56 155 48.44 12.45 24 1 .10 1.0 .4 HUA 1.8X 165 10  
 2001 OCT 23 1657 22.90 19 25.65 155 20.49 6.99 15 4 .10 .5 1.0 KAO 1.0X 100 4

2001 OCT 23 1754 8.05 19 17.35 155 29.40 8.30 24 7 .12 .4 1.0 LSW 1.2X 68 4  
 2001 OCT 23 1809 51.56 19 17.19 155 30.65 8.61 19 4 .14 .6 1.6 LSW 1.0X 130 4  
 2001 OCT 23 1831 21.35 19 22.04 155 12.71 8.18 36 6 .13 .4 .4 SF2 1.5X 140 1  
 2001 OCT 23 2228 49.07 19 31.68 155 26.10 23.72 38 7 .12 .6 .9 DML 1.5X 52 3  
 2001 OCT 23 2322 14.38 19 24.92 155 39.09 3.42 20 4 .08 .8 .6 MLO 1.1X 199 2

2001 OCT 23 2338 22.98 19 23.69 155 29.45 10.32 46 8 .10 .3 .4 KAOF 3.0X 33 4  
 2001 OCT 24 0202 26.83 19 28.47 154 48.21 9.18 17 5 .11 1.5 .4 LER 1.4X 291 5  
 2001 OCT 24 0324 40.90 19 6.83 155 28.14 29.86 4813 .09 .6 1.0 DLS 1.8X 176 5  
 2001 OCT 24 0513 0.52 19 24.85 155 17.09 11.23 21 7 .10 .5 .6 INTL 2.1X 81 0  
 2001 OCT 24 1205 30.57 19 18.76 155 25.34 10.99 20 3 .11 .5 1.1 LSW 1.1X 67 4

2001 OCT 24 1345 1.32 19 27.12 154 53.13 4.90 17 3 .12 .8 1.2 SLE 1.4X 170 3  
 2001 OCT 24 1927 59.44 19 20.75 155 7.44 8.37 42 7 .11 .6 .5 SF4 2.1X 174 5  
 2001 OCT 24 2103 50.74 19 28.94 155 27.26 7.24 16 4 .10 .4 1.5 KAO 1.1X 84 6  
 2001 OCT 24 2324 19.86 19 46.26 155 52.29 31.28 4711 .10 .8 1.4 HUAF 2.7X 203 31  
 2001 OCT 25 0015 33.73 19 14.22 155 15.47 0.02 22 5 .14 .9 .4 SSF # 1.0X 216 9

2001 OCT 25 0718 38.17 19 21.24 155 30.29 10.69 20 3 .08 .4 .9 KAO 1.0X 54 5  
 2001 OCT 25 0747 44.18 19 19.49 155 13.53 8.09 35 6 .11 .5 .8 SF2 1.5X 166 6  
 2001 OCT 25 0851 28.93 19 19.56 155 30.00 9.88 36 6 .09 .3 .7 KAO 1.6X 54 7  
 2001 OCT 25 0923 57.28 19 25.22 155 29.76 10.34 27 6 .09 .4 1.0 KAO 1.3X 42 6  
 2001 OCT 25 1054 16.98 19 2.56 155 23.03 32.78 23 4 .09 1.2 1.7 LOI 1.3X 240 15

2001 OCT 25 1623 32.48 19 14.69 156 20.47 41.69 14 .0913.0 5.7 DIS - 1.9X 326 67  
 2001 OCT 25 1656 8.52 19 22.96 155 25.24 10.03 29 5 .11 .4 .8 KAO 1.2X 39 4  
 2001 OCT 25 1732 14.46 19 20.75 155 13.23 7.55 21 6 .14 .8 .9 SF2 .9X 171 3  
 2001 OCT 25 1846 56.08 19 20.85 155 10.79 7.66 21 4 .11 .7 .7 SF3 1.2X 188 3  
 2001 OCT 25 2010 12.44 19 37.88 156 0.71 40.67 20 5 .09 1.2 1.5 KON 1.3X 278 19

2001 OCT 26 0043 15.35 19 57.37 155 28.66 10.11 25 5 .12 1.1 .4 KEA 1.3X 245 16  
 2001 OCT 26 0121 43.25 19 12.04 155 29.43 33.30 29 8 .08 .7 1.1 DLS 1.4X 84 5  
 2001 OCT 26 0145 38.36 20 0.06 155 31.00 10.17 22 3 .07 1.0 .5 KEA 1.6U 184 22  
 2001 OCT 26 0206 40.12 19 25.56 155 36.63 3.10 15 5 .12 .4 .6 MLO .9X 191 3  
 2001 OCT 26 0246 26.32 20 0.55 155 30.14 5.57 18 4 .13 .7 1.1 KEA 1.1X 193 21

2001 OCT 26 0339 40.42 19 57.86 155 29.90 10.34 30 6 .15 1.1 .6 KEA 1.6X 246 18  
 2001 OCT 26 0438 59.47 18 57.16 155 28.89 34.33 23 3 .08 1.3 1.8 DLS 1.8X 235 20  
 2001 OCT 26 0441 5.00 19 26.37 155 28.55 10.35 22 4 .09 .4 1.0 KAO 1.3X 42 7  
 2001 OCT 26 0806 44.56 19 8.91 155 36.34 0.87 23 2 .17 .6 1.0 LSW 1.5X 114 15  
 2001 OCT 26 1303 49.92 19 53.25 155 25.44 10.96 18 4 .14 .8 .6 KEA 1.1X 142 8

YEAR	MON	DAY	HR	MIN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	GAP	DS
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2001 OCT 26 1751 55.46 19 21.66 155 20.87 14.63 4410 .10 .4 .4 DEP 1.9X 63 5  
 2001 OCT 26 1925 13.63 19 20.66 155 11.02 7.27 32 6 .11 .5 .5 SF3 1.2X 166 3  
 2001 OCT 26 1940 46.15 19 21.50 155 11.05 7.71 40 7 .16 .7 .6 SF3 1.7X 159 2  
 2001 OCT 26 2017 55.88 19 23.20 155 25.24 10.07 28 8 .10 .3 .8 KAO .9X 56 4  
 2001 OCT 27 0615 16.42 19 18.92 155 30.49 7.44 28 6 .11 .3 1.4 LSW 1.2X 49 7

2001 OCT 27 0717 33.49 19 15.67 155 15.76 0.28 35 8 .11 .5 .3 SSF 1.4X 183 7  
 2001 OCT 27 0718 20.95 19 22.72 155 11.41 4.19 16 2 .13 .7 .9 SER 1.0X 123 3  
 2001 OCT 27 0837 29.41 18 52.99 155 13.04 7.36 20 1 .14 1.9 1.0 LOI 1.7X 262 40  
 2001 OCT 27 1230 6.04 19 29.09 154 53.59 0.06 26 3 .13 .3 .5 SLEF 1.8X 102 4  
 2001 OCT 27 1954 42.65 19 22.98 155 14.75 3.36 19 5 .07 .4 .3 SEC 1.6X 114 2

2001 OCT 27 2210 17.56 19 27.13 155 28.47 10.39 42 9 .08 .3 .5 KAO 2.0X 47 9  
 2001 OCT 27 2210 52.33 19 50.31 155 24.22 28.11 21 1 .08 .9 1.5 KEA 1.8X 158 9  
 2001 OCT 27 2219 41.64 19 9.80 155 25.10 39.70 25 7 .11 1.0 1.5 DLS 1.3X 175 5  
 2001 OCT 28 0807 58.20 19 19.84 155 10.37 7.27 33 3 .12 .6 .7 SF3 1.5X 172 4  
 2001 OCT 28 0854 22.39 19 18.10 155 27.13 10.16 22 3 .10 .4 .9 LSW 1.3X 62 8

2001 OCT 28 1220 12.89 19 29.51 155 26.21 4.11 24 4 .16 .4 1.7 KAO 1.5X 71 5  
 2001 OCT 28 1322 17.86 19 16.85 155 28.75 10.61 41 6 .14 .4 .6 LSW 1.8X 54 4  
 2001 OCT 28 1757 6.26 19 21.23 155 10.80 7.40 32 5 .13 .8 .5 SF3 1.5X 176 2  
 2001 OCT 28 2355 37.16 19 20.50 155 11.77 7.30 23 5 .09 .4 .6 SF3 1.2X 181 4  
 2001 OCT 29 0540 39.19 19 19.83 155 13.22 6.69 35 4 .13 .5 .8 SF2 1.5X 166 5

2001 OCT 29 0824 56.07 19 30.84 155 42.22 1.25 19 5 .11 .5 .7 MLO 1.2X 102 6  
 2001 OCT 29 0942 27.53 19 44.23 155 5.28 42.68 32 8 .11 .9 1.5 HIL 1.7X 198 29  
 2001 OCT 29 0956 32.54 19 28.00 155 8.39 36.02 24 5 .11 1.1 1.3 DEP 1.3X 254 2  
 2001 OCT 29 1324 11.30 19 13.85 155 26.03 6.38 21 4 .12 .5 1.5 LSW 1.1X 127 4  
 2001 OCT 29 1735 27.39 19 21.24 155 10.91 6.76 21 2 .12 .7 .8 SF3 1.2X 177 2

2001 OCT 29 2121 38.96 19 12.79 155 22.11 34.54 20 .10 .9 2.1 DEPT 1.7X 176 4  
 2001 OCT 30 0228 28.50 19 11.57 155 28.28 40.95 21 6 .10 1.1 1.4 DLS 1.2X 208 7  
 2001 OCT 30 0259 43.47 19 17.19 155 20.51 7.66 17 4 .12 .7 1.2 SWR .9X 164 4  
 2001 OCT 30 0322 41.68 19 16.47 155 22.13 34.25 32 9 .12 .6 1.1 DEP 1.4X 174 5  
 2001 OCT 30 0411 14.42 19 59.40 155 31.54 4.65 17 6 .11 .8 3.3 KEA 1.0X 180 22

2001 OCT 30 0600 36.24 19 23.31 154 50.41 42.48 4611 .12 .9 .9 LER 2.0X 243 8  
 2001 OCT 30 0700 10.09 19 44.43 155 26.08 42.72 34 8 .08 .7 1.1 KEA 1.7X 96 5  
 2001 OCT 30 0751 13.16 19 26.98 155 28.32 10.62 16 5 .11 .6 1.3 KAO .9X 73 8  
 2001 OCT 30 1306 37.34 19 19.48 155 14.30 26.23 22 2 .13 1.5 1.8 DEP 1.5X 183 6  
 2001 OCT 30 1433 28.31 19 16.45 155 2.46 42.71 42 9 .11 .8 .8 DEP 1.9X 213 15

2001 OCT 30 2103 6.86 19 21.99 155 8.72 7.03 33 4 .17 .6 .7 SF4 1.4X 165 2  
 2001 OCT 31 0018 34.90 19 28.58 155 28.06 6.73 37 7 .13 .3 1.3 KAO 1.6X 55 6  
 2001 OCT 31 0123 51.96 19 14.22 155 31.83 7.96 36 5 .13 .4 .7 LSW 1.9X 134 3  
 2001 OCT 31 0905 56.01 19 16.49 155 24.65 9.52 31 5 .12 .4 .7 SWR 1.4X 89 4  
 2001 OCT 31 1517 5.31 19 14.87 155 35.66 3.33 38 7 .17 .4 1.7 LSW 1.5X 103 10

2001 OCT 31 1655 49.17 19 25.89 155 17.77 13.19 28 6 .13 .6 .9 DEP 1.2X 116 1  
 2001 OCT 31 1958 8.36 19 21.59 155 18.56 1.29 20 5 .08 .3 .6 SWR 1.3X 55 4  
 2001 OCT 31 2146 7.69 19 12.27 155 31.19 11.46 29 5 .15 .8 .6 LSW 1.8U 187 6  
 2001 NOV 1 0227 0.46 19 17.77 155 32.14 10.39 23 8 .11 .4 .9 LSW .9X 84 6  
 2001 NOV 1 0351 16.16 19 20.47 155 13.16 7.23 24 3 .11 .5 .9 SF2 1.0X 63 4

ORIGIN TIME (HST)												ORIGIN TIME (HST)																											
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS

2001 NOV 1 0824 4.74 19 13.43 155 31.59 5.54 23 5 .16 .5 1.4 LSW 1.1X 116 4  
 2001 NOV 1 1152 53.54 20 1.73 155 43.00 17.20 26 5 .17 1.817.2 KOH - 1.5X 272 39  
 2001 NOV 1 1223 37.39 19 20.21 155 7.10 7.82 22 5 .12 .6 1.0 SF4 1.3X 138 5  
 2001 NOV 1 1443 42.91 19 34.24 155 9.13 24.74 17 5 .10 .6 1.9 DEP 1.6X 76 10  
 2001 NOV 1 1856 11.77 19 26.59 155 9.37 35.36 21 8 .09 1.2 .9 DEP 1.2X 192 4

2001 NOV 1 1922 15.64 19 19.78 155 11.73 7.41 32 8 .12 .4 .7 SF3 1.2X 87 5  
 2001 NOV 1 2031 43.93 20 0.28 155 44.91 8.28 23 4 .09 .8 KOH 1.4X 151 14  
 2001 NOV 1 2209 49.44 19 23.14 155 14.80 3.13 19 4 .07 .3 .3 SEC 1.6X 65 2  
 2001 NOV 2 0038 29.20 19 51.20 156 12.43 43.45 37 7 .12 1.3 2.2 HUA 2.2X 201 43  
 2001 NOV 2 0241 28.73 19 18.82 155 12.96 33.50 44 8 .11 .7 .9 DEP 1.7X 89 3

2001 NOV 2 0315 29.84 19 30.59 155 51.35 6.08 16 3 .14 1.0 5.1 KON .9X 184 10  
 2001 NOV 2 0418 8.78 19 22.99 155 16.90 12.22 31 6 .10 .5 .6 INT 1.1X 48 2  
 2001 NOV 2 0551 15.12 19 34.37 155 21.84 9.07 26 6 .13 .4 .8 MLO 1.1X 64 9  
 2001 NOV 2 0732 6.42 19 16.99 155 31.22 7.49 29 5 .15 .5 1.4 LSW 1.3X 142 4  
 2001 NOV 2 1054 57.29 19 24.37 155 17.12 9.18 28 5 .16 .5 .6 INTL 2.0X 46 1

2001 NOV 2 1152 52.42 19 10.88 155 24.64 38.89 5012 .09 .8 .9 DEP 2.2X 179 6  
 2001 NOV 2 1446 11.60 19 12.90 155 32.63 4.90 34 8 .20 .5 2.1 LSW 1.4X 81 6  
 2001 NOV 2 1647 43.54 19 26.27 154 49.26 8.55 34 6 .13 1.1 .4 LER 2.0X 266 4  
 2001 NOV 2 2058 10.90 19 19.52 155 12.50 7.06 26 1 .09 .5 .9 SF2 1.4X 85 5  
 2001 NOV 2 2237 23.85 19 25.87 155 22.33 10.50 31 8 .09 .4 .6 KAO 1.1X 55 4

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2001 NOV 3 0044 21.21 19 20.37 155 4.19 6.67 29 2 .15 .7 1.0 SF5 1.2X 170 7  
 2001 NOV 3 0046 6.32 19 44.96 155 32.94 15.75 16 2 .05 .7 .8 KEA 1.4X 156 10  
 2001 NOV 3 0106 6.98 19 25.50 155 30.48 11.95 17 3 .06 .5 1.2 KAO 1.1X 68 7  
 2001 NOV 3 0442 22.42 19 32.04 155 52.17 8.69 21 3 .12 .7 .6 KON 1.5X 205 11  
 2001 NOV 3 0518 22.67 19 18.52 154 58.75 39.23 4510 .12 .9 1.1 LER 1.6X 206 12

2001 NOV 3 0737 18.04 19 49.24 155 23.24 20.53 15 3 .11 1.4 1.7 KEA # 1.5X 151 9  
 2001 NOV 3 1022 32.86 19 27.01 155 27.64 10.56 21 5 .10 .4 1.2 KAO 1.1X 66 8  
 2001 NOV 3 1239 53.85 19 24.02 155 17.96 3.18 16 4 .08 .7 .7 SSC 1.2X 77 2  
 2001 NOV 3 1601 12.76 19 15.00 155 16.03 39.42 16 .06 2.4 4.3 DEP 1.3X 215 6  
 2001 NOV 3 1747 20.92 19 25.12 155 29.64 10.81 14 2 .11 .7 1.4 KAO 1.3X 86 6

2001 NOV 3 1747 31.08 19 13.72 155 26.26 6.40 16 2 .15 .5 1.2 LSW 1.0X 122 4  
 2001 NOV 3 1759 53.52 19 13.13 155 32.32 6.26 32 3 .14 .5 1.0 LSW 1.4X 77 5  
 2001 NOV 3 1948 37.77 19 23.34 155 16.72 3.15 41 8 .11 .3 .2 SSC 2.2X 46 0  
 2001 NOV 3 1949 22.54 19 10.32 155 41.72 9.22 19 1 .12 .6 2.4 LSW 2.0X 113 8  
 2001 NOV 3 2125 6.74 19 19.69 155 27.41 10.60 25 4 .12 .4 .6 KAO 1.2X 82 5

2001 NOV 3 2158 32.27 19 12.01 155 16.20 48.62 21 4 .09 1.0 2.0 DEP 1.4X 203 10  
 2001 NOV 3 2159 5.60 19 12.21 155 17.27 47.83 34 4 .09 .7 1.3 DEP 2.0X 180 11  
 2001 NOV 3 2328 8.69 19 20.78 155 6.75 5.74 29 3 .11 .5 .8 SF4 1.3X 134 5  
 2001 NOV 4 0211 3.10 19 20.16 155 13.07 5.99 23 2 .10 .5 .9 SF2 .9X 67 5  
 2001 NOV 4 0522 55.24 19 25.75 155 17.32 14.00 21 6 .12 .7 .6 DEPL 1.9X 123 1

2001 NOV 4 0702 5.12 19 20.45 155 12.31 6.12 16 1 .07 .6 1.0 SF2 1.0X 74 4  
 2001 NOV 4 1853 41.25 19 17.99 155 13.06 5.60 30 4 .12 .4 .9 SF2 1.2X 105 2  
 2001 NOV 4 1903 21.15 19 20.06 155 6.48 7.53 21 3 .11 .6 .7 SF4 1.1X 153 6  
 2001 NOV 4 1930 30.75 19 18.34 155 47.60 11.22 45 8 .10 .5 .4 KONF 2.8X 111 9  
 2001 NOV 4 1931 47.47 19 18.36 155 47.23 8.86 21 2 .12 .8 1.2 KON 1.9X 193 14

ORIGIN TIME (HST)												ORIGIN TIME (HST)																											
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS

2001 NOV 4 2036 10.98 19 39.40 155 52.94 29.25 27 7 .12 .9 1.3 HUA 1.5X 246 6  
 2001 NOV 5 0012 59.45 19 24.82 155 28.90 8.89 29 3 .08 .3 .9 KAO 1.2X 40 5  
 2001 NOV 5 0507 44.04 19 37.96 155 57.40 15.70 32 6 .13 1.3 .8 KON 1.9X 264 14  
 2001 NOV 5 0509 56.79 19 37.29 155 55.49 15.71 45 8 .13 .7 .9 KONF 2.5X 130 11  
 2001 NOV 5 0512 28.44 19 23.94 155 17.14 12.67 14 4 .18 1.2 1.3 INTL 2.2X 52 1

2001 NOV 5 0644 30.72 19 19.29 155 9.09 7.53 22 1 .09 .5 1.0 SF4 1.2X 92 4  
 2001 NOV 5 1128 53.20 20 2.82 156 5.16 7.74 29 6 .20 1.1 1.2 KOH 2.0X 177 33  
 2001 NOV 5 1527 56.50 19 23.58 155 17.80 27.55 23 5 .11 .9 1.4 DEP 1.2X 96 3  
 2001 NOV 6 0207 5.75 19 23.44 155 22.65 10.36 14 2 .06 .6 1.5 KAO .8X 72 6  
 2001 NOV 6 0256 2.10 19 22.05 155 13.07 3.45 15 2 .03 .4 .4 SER 1.6X 52 1

2001 NOV 6 0322 18.54 19 29.00 155 28.46 7.87 29 7 .11 .3 1.1 KAO 1.3X 66 6  
 2001 NOV 6 0505 16.40 19 24.46 155 17.17 11.50 22 4 .14 .6 .7 INTL 1.8X 47 1  
 2001 NOV 6 0737 5.47 19 30.85 155 51.92 27.63 19 4 .13 1.7 1.2 KON 1.2X 270 11  
 2001 NOV 6 0825 31.95 19 19.59 155 8.55 8.06 20 3 .08 .6 1.0 SF4 1.2X 124 4  
 2001 NOV 6 1101 2.83 19 28.31 155 25.90 8.01 16 4 .11 .4 1.4 KAO 1.2X 78 5

2001 NOV 6 1430 1.04 19 24.31 155 17.77 8.07 14 3 .13 .6 1.0 INTL 1.9X 85 2  
 2001 NOV 6 1525 6.17 19 23.18 155 14.88 2.79 18 3 .08 .3 .4 SEC 1.4X 70 2  
 2001 NOV 6 1525 40.21 19 23.29 155 14.83 3.55 19 4 .09 .4 .5 SEC 1.4X 134 2  
 2001 NOV 6 1703 49.75 19 33.83 155 57.98 37.88 20 3 .13 1.5 2.0 KON 1.4X 249 19  
 2001 NOV 7 0015 16.41 19 22.05 155 4.31 7.00 29 4 .14 .6 .7 SF5 1.1X 158 4

2001 NOV 7 0142 49.45 19 50.99 155 22.32 29.83 29 7 .10 .7 1.2 KEA 1.4X 144 5  
 2001 NOV 7 0415 25.18 19 23.61 155 2.81 7.38 23 1 .13 1.3 .7 SF5 1.5X 182 3  
 2001 NOV 7 0529 48.55 19 18.13 155 0.20 38.56 39 4 .11 .9 1.4 DEP 2.0X 202 13  
 2001 NOV 7 0933 7.21 19 19.33 155 8.46 7.15 25 2 .11 .5 1.0 SF4 1.3X 127 4  
 2001 NOV 7 1133 42.24 19 32.41 155 51.26 9.16 14 3 .12 .8 1.6 KON 1.0X 135 9

2001 NOV 7 1138 50.72 19 36.14 156 33.36 33.53 38 7 .13 1.5 2.8 DIS 2.4X 288 68  
 2001 NOV 7 1433 38.28 19 22.95 155 30.61 11.63 27 4 .12 .5 1.1 KAO 1.3X 51 5  
 2001 NOV 7 1604 14.18 19 19.20 155 13.01 4.01 38 6 .13 .3 1.1 SSF 1.7X 81 4  
 2001 NOV 7 1620 54.87 19 19.16 155 12.25 7.11 27 6 .15 .5 1.0 SF3 1.1X 96 4  
 2001 NOV 7 1701 15.84 19 19.65 155 12.83 8.50 36 3 .13 .4 .6 SF2 1.5X 116 6

2001 NOV 7 1826 58.51 19 19.12 155 12.86 5.53 39 6 .14 .4 1.0 SF2 1.2X 86 4  
 2001 NOV 7 1831 35.11 19 18.67 155 15.69 3.75 24 3 .11 .3 1.4 SSF 1.1X 104 5  
 2001 NOV 7 2001 16.38 19 17.75 155 47.40 7.39 23 6 .14 .8 2.6 KON .9X 196 15  
 2001 NOV 7 2119 25.98 19 19.96 155 10.83 6.33 35 6 .13 .5 .9 SF3 1.2X 88 4  
 2001 NOV 7 2230 29.31 19 10.39 155 37.90 7.06 22 4 .16 .6 1.7 LSW 1.2X 95 14

2001 NOV 8 0333 11.95 20 4.87 155 31.37 43.60 3410 .10 .9 1.1 KEA 1.7X 270 28  
 2001 NOV 8 0439 38.66 19 18.32 155 13.96 3.99 22 4 .09 .4 .9 SSF .8X 89 3  
 2001 NOV 8 0537 41.41 19 23.14 155 14.66 3.32 16 6 .09 .4 .4 SEC 1.3X 95 3  
 2001 NOV 8 1445 53.05 19 19.80 155 11.66 10.30 5112 .11 .4 .4 SF3F 2.8X 88 5  
 2001 NOV 8 1750 27.84 19 10.60 155 38.76 5.66 27 4 .12 .4 3.6 LSW 1.2X 90 13

2001 NOV 8 1923 4.24 19 18.40 155 13.17 9.17 37 3 .11 .5 .6 SF2 1.6X 137 8  
 2001 NOV 8 2212 36.07 19 24.60 155 17.12 6.87 20 1 .11 .5 .7 INTL 1.9X 50 1  
 2001 NOV 9 0402 52.20 19 12.48 155 13.61 48.98 18 4 .11 1.4 1.5 DEP 1.1X 277 13  
 2001 NOV 9 0901 29.62 19 19.33 155 11.20 6.47 31 5 .10 .4 .9 SF3 1.4X 102 6  
 2001 NOV 9 1132 53.81 19 20.52 155 10.69 7.26 24 2 .10 .5 .8 SF3 1.6X 95 3

ORIGIN TIME (HST)											LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS						

2001 NOV 9 1706 44.25 19 22.43 155 4.89 8.73 37 3 .10 .6 .4 SF5 2.2X 142 4  
 2001 NOV 9 2040 56.05 19 20.85 155 13.18 7.87 26 1 .12 .5 .9 SF2 1.2X 62 3  
 2001 NOV 9 2113 29.62 19 27.69 155 16.08 10.06 25 4 .10 .7 .8 INTL 2.2X 145 5  
 2001 NOV 9 2320 5.31 19 22.55 155 4.67 7.62 39 6 .12 .4 .4 SF5 1.9X 142 3  
 2001 NOV 10 0504 26.47 19 24.84 155 19.12 6.01 16 4 .07 .6 1.2 KAO 1.1X 106 3

2001 NOV 10 0626 20.82 19 19.93 155 16.80 7.23 27 4 .11 .4 .8 SF1 1.3X 90 5  
 2001 NOV 10 1058 44.20 19 29.97 155 15.56 19.29 19 3 .09 1.3 .9 DEPL 2.4X 194 9  
 2001 NOV 10 1307 58.03 19 47.92 155 47.11 21.78 18 2 .14 1.3 2.9 HUA 1.2X 232 14  
 2001 NOV 10 2339 37.10 19 16.63 155 7.32 40.90 4811 .11 .8 .9 DEP 2.2X 187 2  
 2001 NOV 11 0330 0.23 19 25.02 155 15.81 11.20 25 3 .12 .7 .5 INTL 2.3X 116 2

2001 NOV 11 0756 4.53 19 11.75 155 27.85 10.34 23 3 .08 .5 .6 LSW 1.9U 129 4  
 2001 NOV 11 1248 34.50 19 27.42 155 13.43 36.12 37 6 .12 .6 1.1 DEP 1.8X 51 8  
 2001 NOV 11 1309 39.31 19 38.49 155 49.58 15.70 18 4 .15 1.1 1.0 KON 1.5X 121 5  
 2001 NOV 11 1454 34.30 19 18.70 155 13.14 6.76 34 5 .11 .5 1.0 SF2 1.6X 86 3  
 2001 NOV 11 1714 30.20 19 25.38 155 17.28 8.57 19 3 .11 .6 .5 INTL 2.0X 119 1

2001 NOV 12 0033 47.69 21 18.18 156 19.39 32.94 9 1 .04 5.5 3.1 DIS 2.2X 319 63  
 2001 NOV 12 1125 29.03 19 20.38 155 7.03 7.67 49 8 .12 .5 .5 SF4 2.5X 133 6  
 2001 NOV 12 1136 49.31 19 22.64 155 19.60 0.03 21 4 .10 .3 .4 KAOL# 2.0X 65 5  
 2001 NOV 12 1353 19.77 20 49.52 156 50.06 6.53 14 .0611.6 3.1 DIS - 2.4X 316 48  
 2001 NOV 13 0231 22.34 19 24.79 155 16.11 12.38 20 3 .10 .6 .7 INTL 2.1X 106 2

2001 NOV 13 0841 54.38 19 14.68 155 4.10 47.59 5412 .12 .8 .9 DEP 2.9X 203 8  
 2001 NOV 13 1453 27.37 19 25.32 155 16.83 9.93 23 5 .09 .5 .6 INTL 1.9X 111 1  
 2001 NOV 13 1545 42.52 19 21.10 155 18.10 5.43 15 2 .07 .6 1.5 SWR 1.2X 70 2  
 2001 NOV 13 1738 13.08 19 23.67 155 15.24 2.91 13 5 .09 .4 .7 SEC 1.1X 169 2  
 2001 NOV 13 2258 19.88 19 20.83 155 13.10 7.93 36 5 .09 .4 .5 SF2 1.2X 61 3

2001 NOV 14 0056 6.48 19 19.50 155 11.98 7.36 22 2 .10 .5 .9 SF3 1.2X 91 5  
 2001 NOV 14 0133 30.58 19 24.76 155 20.68 2.11 22 5 .09 .3 .8 KAO 1.2X 77 5  
 2001 NOV 14 0945 15.01 19 23.62 155 15.29 4.35 14 4 .20 .6 .8 SECL 1.9X 157 2  
 2001 NOV 14 2206 28.25 19 20.70 155 13.26 7.94 25 2 .12 .5 .8 SF2 1.4X 61 4  
 2001 NOV 14 2227 55.03 19 25.53 155 16.81 9.36 21 4 .13 .5 .8 INTL 2.0X 74 1

2001 NOV 14 2322 54.82 19 18.47 154 59.64 39.69 34 5 .11 1.0 1.4 LER 1.8X 228 13  
 2001 NOV 15 0127 22.17 19 21.81 155 4.34 6.93 23 3 .13 .7 .8 SF5 1.2X 160 5  
 2001 NOV 15 0517 40.23 19 20.76 155 12.96 7.77 25 2 .12 .5 .7 SF2 1.0X 63 3  
 2001 NOV 15 0529 56.69 19 23.63 155 17.03 2.77 16 6 .09 .5 .2 SSC 1.4X 76 0  
 2001 NOV 15 1037 45.31 19 20.82 155 9.98 6.56 24 2 .11 .5 1.0 SF3 1.0X 94 2

2001 NOV 15 1221 36.08 20 50.34 156 20.42 28.61 28 6 .12 1.6 .9 DIS 2.7X 288 13  
 2001 NOV 15 1223 21.76 19 12.11 155 33.01 7.34 20 2 .14 1.0 1.5 LSW 1.4X 207 7  
 2001 NOV 15 1244 0.38 19 12.51 155 31.87 6.62 21 2 .11 .5 1.1 LSW 1.4X 129 6  
 2001 NOV 15 1246 59.60 19 23.31 155 19.63 9.70 16 4 .09 .7 1.3 KAOL 1.5X 68 5  
 2001 NOV 15 1338 40.62 19 24.48 155 18.93 15.78 20 4 .12 1.0 .6 DEPL 2.1X 81 3

2001 NOV 15 1414 48.71 19 19.14 155 28.24 10.99 5112 .13 .3 .4 KAO 2.8X 42 6  
 2001 NOV 16 0105 48.09 19 12.43 155 34.90 6.63 32 2 .15 .4 1.3 LSW 1.7X 121 10  
 2001 NOV 16 0230 29.86 19 19.53 155 9.20 8.11 26 2 .08 .4 .6 SF3 1.4X 91 5  
 2001 NOV 16 0408 2.12 19 27.21 155 28.05 9.26 21 3 .11 .4 1.3 KAO 1.3X 56 9  
 2001 NOV 16 0413 48.47 19 25.55 155 17.08 6.85 28 4 .11 .4 .5 INTL 2.3X 65 1

ORIGIN TIME (HST)											LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS						

2001 NOV 16 0845 15.31 19 27.52 155 25.81 6.01 19 2 .10 .4 2.0 KAO 1.3X 65 6  
 2001 NOV 16 1241 44.56 19 24.20 155 20.11 1.74 18 4 .08 .3 .8 KAO 1.1X 72 5  
 2001 NOV 16 2013 40.49 19 21.11 155 30.01 8.00 23 3 .08 .4 1.2 KAO 1.3X 51 5  
 2001 NOV 16 2313 46.24 19 24.47 155 17.25 10.78 15 3 .08 .6 .8 INTL 2.1X 80 2  
 2001 NOV 17 0005 46.24 19 8.64 155 10.21 37.69 22 4 .10 1.7 1.2 LOI 1.4X 283 16

2001 NOV 17 0012 35.73 19 21.40 155 29.93 8.98 36 8 .11 .3 .9 KAO 1.2X 39 5  
 2001 NOV 17 0142 8.52 19 20.21 155 7.00 5.44 22 4 .10 .6 1.3 SF4 .9X 142 6  
 2001 NOV 17 0409 24.38 19 45.94 155 25.79 22.54 22 6 .13 1.1 1.2 KEA 1.3X 226 3  
 2001 NOV 17 0542 54.89 19 20.99 155 5.69 4.78 28 3 .16 .6 2.4 SSF 1.2X 154 6  
 2001 NOV 17 1458 20.10 19 14.01 155 26.32 6.68 25 6 .14 .4 1.2 LSW .9X 118 4

2001 NOV 17 1909 26.11 19 31.54 155 22.06 1.72 12 2 .10 .5 1.0 MLO .9X 199 4  
 2001 NOV 17 2123 45.72 19 22.04 155 30.07 10.64 24 4 .13 .5 1.1 KAO 1.0X 37 4  
 2001 NOV 17 2237 3.31 19 24.76 155 16.40 0.89 15 3 .26 .6 .4 SNCL 1.6X 115 1  
 2001 NOV 18 0740 54.69 19 20.68 155 8.18 7.31 27 3 .11 .4 .9 SF4 1.0X 113 4  
 2001 NOV 18 1143 10.57 19 33.04 155 37.16 10.45 20 2 .13 .8 .9 MLO 1.4X 172 4

2001 NOV 18 2004 32.63 19 5.22 155 6.06 36.77 34 7 .11 1.2 1.9 LOI 1.9X 250 23  
 2001 NOV 18 2005 44.14 19 20.60 155 10.92 6.32 21 2 .12 1.0 1.3 SF3 1.0X 179 5  
 2001 NOV 19 0035 31.05 19 20.04 155 9.09 8.28 17 .05 .5 .9 SF4 1.2X 96 4  
 2001 NOV 19 0119 24.38 19 15.34 155 31.52 31.03 16 1 .06 .9 3.0 DLS 1.2X 97 3  
 2001 NOV 19 0121 43.94 19 26.44 155 17.35 9.99 16 4 .11 .7 .9 INTL 2.4X 133 2

2001 NOV 19 0705 15.23 19 20.66 155 10.03 6.77 23 3 .11 .5 .8 SF3 1.2X 93 3  
 2001 NOV 19 1220 50.43 19 44.94 155 25.15 29.04 16.5 0.8 .7 1.5 KEA 1.2X 139 17  
 2001 NOV 19 1249 43.07 19 19.16 155 15.54 7.24 36 5 .13 .4 .7 SF1 1.8X 92 4  
 2001 NOV 19 1612 59.15 19 12.41 155 37.81 2.09 26 4 .18 .5 1.2 LSW 1.3X 90 14  
 2001 NOV 19 2105 43.82 19 20.25 155 7.35 7.74 32 5 .10 .4 .6 SF4 1.3X 128 5

2001 NOV 20 0439 2.71 19 30.71 155 55.52 12.59 33 7 .11 .8 .5 KON 2.0X 228 21  
 2001 NOV 20 0536 56.73 19 17.92 155 13.76 4.39 17 .11 .5 1.1 SSF 1.1X 76 2  
 2001 NOV 20 0714 28.11 19 22.36 155 29.44 8.87 20 1 .10 .4 .9 KAO 1.6X 44 3  
 2001 NOV 20 0941 47.23 19 17.73 155 13.54 5.15 29 7 .10 .4 .7 SF2 1.3X 80 1  
 2001 NOV 20 1006 28.71 19 22.92 155 5.60 5.41 23 .13 .7 1.1 SF4 1.3X 161 4

2001 NOV 20 1118 29.60 19 19.63 155 13.03 5.78 29 3 .11 .4 1.0 SF2 1.4X 75 5  
 2001 NOV 20 1534 15.96 19 29.46 154 50.87 3.45 11 .09 2.7 1.7 SLE 1.3X 159 1  
 2001 NOV 20 1601 19.58 18 56.66 155 13.16 12.49 19 .11 2.3 .8 LOI 1.9X 251 35  
 2001 NOV 20 1621 47.65 19 16.84 155 28.82 9.05 23 3 .17 .6 1.0 LSW 1.2X 78 4  
 2001 NOV 20 1736 24.97 19 14.93 155 33.05 10.12 20 4 .13 .5 1.1 LSW 1.1X 112 5

2001 NOV 20 2030 37.55 18 56.41 155 24.70 40.36 24 6 .09 1.4 1.7 LOI 1.4X 289 25  
 2001 NOV 20 2235 44.99 19 17.82 155 13.44 4.57 33 5 .11 .4 .7 SSF 1.1X 88 1  
 2001 NOV 21 0014 19.52 19 24.58 155 17.02 9.70 20 3 .13 .6 .8 INTL 2.0X 56 1  
 2001 NOV 21 0349 37.03 19 24.36 155 16.78 1.32 16 4 .09 .4 .2 SSC 1.5X 80 1  
 2001 NOV 21 0909 12.34 19 30.32 155 44.20 4.61 21 7 .12 .6 1.4 KON 1.0X 123 3

2001 NOV 21 1038 48.94 19 14.46 155 26.81 8.52 27 3 .11 .4 .7 LSW 1.5X 100 5  
 2001 NOV 21 1451 17.18 19 14.35 155 27.89 5.67 16 2 .16 .5 1.9 LSW 1.5X 89 4  
 2001 NOV 21 1629 26.08 19 26.37 156 2.60 9.08 17 2 .12 2.1 .6 KON 1.3U 260 14  
 2001 NOV 21 1902 27.91 20 2.52 155 35.10 22.45 16 3 .11 1.4 3.1 KOH 1.6X 219 22  
 2001 NOV 21 1908 0.33 19 23.81 155 17.62 8.30 16 4 .12 .6 .8 INTL 2.0X 74 2

ORIGIN TIME (HST)												ORIGIN TIME (HST)																										
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS							DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS

2001 NOV 21 2151 56.39 19 25.78 155 15.97 2.37 19 5 .11 .4 .5 SNC 1.9X 125 2  
 2001 NOV 21 2311 59.70 19 36.08 155 18.96 12.11 21 4 .13 .6 1.0 KEA 1.4X 105 14  
 2001 NOV 21 2325 6.11 19 20.39 155 19.13 2.76 21 5 .11 .3 .9 SWR 1.3X 54 5  
 2001 NOV 22 0226 11.55 19 17.91 155 30.37 9.18 23 3 .13 .4 .9 LSW 1.2X 65 5  
 2001 NOV 22 0259 14.15 19 24.65 155 19.05 8.28 17 4 .11 .6 1.4 KAO 1.1X 99 3

2001 NOV 22 0332 23.88 19 12.94 155 26.54 37.93 31 5 .09 .7 1.4 DLS 1.4X 126 5  
 2001 NOV 22 0437 40.56 20 0.46 155 31.65 0.54 29 5 .13 .8 .3 KEA 2.1X 185 26  
 2001 NOV 22 0820 37.06 19 22.01 155 15.00 10.41 27 6 .09 .5 .7 SF1 1.7X 58 2  
 2001 NOV 22 1155 21.79 19 24.64 155 19.34 6.81 25 5 .09 .4 1.0 KAO 1.3X 67 3  
 2001 NOV 22 1201 54.96 19 24.71 155 19.18 6.89 21 3 .09 .5 1.3 KAO 1.3X 91 3

2001 NOV 22 1826 1.87 19 20.17 155 10.80 6.97 18 1 .09 .6 1.1 SF3 1.0X 93 4  
 2001 NOV 22 2128 1.89 19 25.83 155 13.70 28.09 42 6 .10 .5 .8 DEP 1.6X 65 6  
 2001 NOV 23 0003 58.51 19 9.69 155 26.42 31.03 42 9 .07 .6 1.0 DLS 1.5X 165 3  
 2001 NOV 23 0454 52.44 19 32.83 155 44.60 3.58 15 3 .11 .7 2.2 KON 1.2X 119 5  
 2001 NOV 23 0641 20.55 19 13.73 155 36.29 7.56 25 8 .13 .4 2.2 LSW 1.1X 88 11

2001 NOV 23 0718 54.62 20 13.34 155 25.66 38.18 27 4 .10 1.0 2.1 KEA 1.7X 202 38  
 2001 NOV 23 0809 10.40 19 18.48 155 15.32 7.73 23 7 .09 .4 .7 SF1 1.0X 115 4  
 2001 NOV 23 0845 47.46 19 33.07 155 38.33 8.00 30 7 .11 .6 1.1 MLO 1.4X 172 8  
 2001 NOV 23 0854 26.79 19 11.31 155 18.97 45.57 43 8 .10 .7 1.1 DEP 2.0X 180 10  
 2001 NOV 23 1419 45.10 19 26.98 155 28.79 13.21 19 5 .12 .6 1.3 DML 1.3X 77 8

2001 NOV 23 1811 47.42 19 24.90 155 19.57 3.35 17 4 .09 .6 1.1 KAO 1.0X 96 4  
 2001 NOV 24 0001 17.53 19 27.16 155 29.11 10.59 18 3 .10 .6 1.4 KAO .9X 76 8  
 2001 NOV 24 0329 31.43 19 13.14 155 20.94 46.29 37 9 .12 .7 1.1 DEP 1.6X 161 6  
 2001 NOV 24 0413 15.36 19 26.76 155 29.13 10.74 18 5 .10 .4 1.1 KAO 1.0X 82 8  
 2001 NOV 24 0630 40.09 18 56.18 155 12.96 13.09 19 1 .10 1.9 1.0 LOI 1.7X 249 36

2001 NOV 24 0726 11.41 19 55.98 155 41.96 3.61 11 3 .10 .7 2.1 KOH 1.3X 166 23  
 2001 NOV 24 1109 14.88 19 1.34 155 23.40 41.02 23 6 .12 1.3 1.4 LOI 1.5X 218 17  
 2001 NOV 24 1220 21.51 19 23.86 155 28.84 10.19 18 4 .10 .5 1.0 KAO .9X 98 3  
 2001 NOV 24 1237 19.70 19 11.99 155 31.36 5.75 21 6 .17 .9 1.7 LSW 1.1X 198 6  
 2001 NOV 24 1349 13.38 19 45.35 155 20.91 13.23 23 5 .12 .4 .3 KEA 1.3X 98 12

2001 NOV 24 1400 41.76 19 23.96 155 28.84 10.46 20 4 .10 .5 1.0 KAO 1.2X 103 3  
 2001 NOV 24 2019 38.31 19 13.20 155 32.48 5.90 38 5 .13 .4 1.3 LSW 2.1X 77 5  
 2001 NOV 24 2119 21.90 19 20.41 155 19.85 34.18 33 7 .13 .7 1.2 DEP 1.5X 60 5  
 2001 NOV 24 2146 17.17 19 26.47 155 14.15 2.58 26 4 .12 .5 1.0 SNCL 2.0X 196 6  
 2001 NOV 24 2158 37.80 19 12.13 155 26.43 38.90 28 7 .11 .8 1.1 DLS 1.3X 140 5

2001 NOV 24 2205 1.63 19 23.53 155 18.72 7.56 14 4 .15 .8 1.1 INTL 1.5X 93 4  
 2001 NOV 25 0101 24.02 19 9.65 155 32.87 48.43 19 .11 1.6 3.6 DLST 1.6X 178 9  
 2001 NOV 25 0113 12.28 19 10.01 155 33.78 52.06 35 8 .16 .8 1.3 DLS 1.6X 113 10  
 2001 NOV 25 0631 26.61 19 11.96 155 39.71 4.83 25 6 .14 .4 4.8 LSW 1.4X 96 12  
 2001 NOV 25 1357 47.19 19 23.78 155 16.81 3.36 15 3 .07 .6 .3 SSC 1.3X 77 0

2001 NOV 25 1551 38.02 19 23.11 155 16.45 10.37 15 3 .12 .6 .9 INTL 1.9X 92 1  
 2001 NOV 25 1603 26.97 19 25.04 155 19.83 6.13 40 7 .10 .3 .7 KAO 1.9X 46 4  
 2001 NOV 25 1815 28.63 19 12.67 155 26.76 38.18 28 4 .09 .9 1.5 DLS 1.2X 124 6  
 2001 NOV 25 2021 19.85 18 56.39 155 23.83 35.96 20 2 .08 1.6 2.2 LOI 1.6X 255 25  
 2001 NOV 26 0131 54.85 19 23.89 155 15.06 0.02 9 2 .07 .3 .6 SECL# 1.7X 159 3

ORIGIN TIME (HST)												ORIGIN TIME (HST)																									
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS

2001 NOV 26 0334 49.02 19 12.78 155 26.64 38.74 30 4 .10 .8 1.5 DLS 1.4X 125 5  
 2001 NOV 26 0712 44.75 19 17.56 155 37.49 9.22 17 2 .12 .5 1.7 LSW 1.4X 104 8  
 2001 NOV 26 0840 54.75 19 30.19 155 43.43 7.55 21 4 .14 .6 1.4 KON 1.3X 121 4  
 2001 NOV 26 1035 7.81 19 23.58 155 17.81 7.77 13 2 .08 .8 .9 INTL 1.6X 65 2  
 2001 NOV 26 1109 39.67 19 31.41 155 42.57 2.37 16 3 .14 .5 1.5 MLO 1.2X 104 6

2001 NOV 26 1131 37.60 19 27.54 155 27.86 10.76 20 4 .09 .4 1.2 KAO 1.3X 60 8  
 2001 NOV 26 1732 5.88 18 44.47 155 27.20 16.78 28 6 .11 1.215.0 DLS - 1.7X 292 46  
 2001 NOV 26 1759 59.93 19 24.10 155 17.58 7.48 12 2 .15 1.0 1.2 INTL 2.1X 82 2  
 2001 NOV 27 0559 16.81 19 25.67 155 15.49 8.63 13 3 .11 .7 1.0 INTL 2.1X 124 3  
 2001 NOV 27 1000 31.70 19 19.01 154 58.82 39.44 26 5 .09 1.4 1.3 LER 1.9X 237 11

2001 NOV 27 1141 58.72 18 45.01 155 10.94 20.03 21 5 .22 2.017.4 LOI - 2.1X 278 54  
 2001 NOV 27 1234 3.01 19 58.60 155 33.07 1.54 15 3 .09 .6 .8 KEA 1.4X 167 24  
 2001 NOV 27 1304 39.92 19 23.82 155 16.44 7.98 11 3 .10 .7 .9 INTL 1.9X 104 0  
 2001 NOV 27 2003 15.12 19 20.78 155 7.76 7.82 21 6 .13 .4 .9 SF4 1.2X 121 4  
 2001 NOV 27 2113 30.35 19 25.50 155 17.52 2.63 12 3 .11 .7 .2 SNCL 2.0X 119 0

2001 NOV 27 2114 55.71 19 28.60 155 26.87 8.24 17 5 .11 .4 1.3 KAO 1.3X 71 6  
 2001 NOV 27 2120 50.46 19 19.55 155 8.55 6.51 34 4 .10 .4 .8 SF4 1.5X 106 4  
 2001 NOV 27 2136 48.44 19 25.47 155 15.67 3.88 10 2 .12 .9 1.3 SNCL 1.7X 122 3  
 2001 NOV 27 2300 10.78 19 28.57 155 25.25 7.26 44 7 .12 .3 .6 KAO 2.1X 62 4  
 2001 NOV 28 0034 42.06 19 24.08 155 14.84 5.75 15 3 .11 .6 .9 INT 1.6X 150 3

2001 NOV 28 0050 49.02 19 30.92 155 51.82 4.30 15 5 .11 .8 5.4 KON 1.0X 124 6  
 2001 NOV 28 0114 44.74 19 24.43 154 49.99 43.70 41 6 .12 1.1 1.2 LER 2.0X 247 6  
 2001 NOV 28 0233 34.08 19 23.96 155 16.54 11.42 22 4 .14 .7 .9 INTL 2.0X 80 0  
 2001 NOV 28 0632 32.52 19 18.00 155 29.77 8.35 19 3 .15 .6 1.5 LSW .9X 118 9  
 2001 NOV 28 1016 18.61 19 25.40 155 15.95 12.31 14 2 .09 .8 .9 INTL 1.9X 120 2

2001 NOV 28 1016 22.09 20 8.87 155 45.19 22.55 15 6 .27 1.5 1.5 KOH 1.8X 168 4  
 2001 NOV 28 1533 56.90 19 24.60 155 29.67 8.92 21 3 .10 .4 1.1 KAO 1.2X 70 5  
 2001 NOV 28 1925 28.08 19 26.67 155 16.16 13.22 12 4 .13 1.1 1.2 DEPL 1.7X 239 3  
 2001 NOV 28 2020 45.42 19 25.32 155 17.07 8.77 16 5 .13 .7 .8 INTL 2.4X 118 1  
 2001 NOV 28 2055 57.51 19 20.48 155 11.02 9.75 23 3 .07 .5 .7 SF3 1.1X 78 4

2001 NOV 28 2133 26.09 19 15.68 155 31.88 0.91 38 6 .14 .3 .5 LSW 2.7U 57 13  
 2001 NOV 29 0451 5.14 19 23.80 155 2.38 7.10 13 1 .10 1.0 .8 SF5 1.5X 191 3  
 2001 NOV 29 0706 10.69 19 48.56 156 33.35 27.61 29 2 .14 2.3 5.0 DIS 2.6X 235 76  
 2001 NOV 29 0729 13.93 19 17.48 155 15.78 3.82 17 2 .10 .5 1.0 SSF 1.0X 148 4  
 2001 NOV 29 1116 5.66 19 24.70 155 17.05 7.31 12 3 .12 .8 .5 INTL 2.1X 92 0

2001 NOV 29 1149 54.45 19 18.89 155 29.94 8.25 39 5 .13 .4 .8 LSW 1.7X 55 7  
 2001 NOV 29 1444 8.66 19 22.95 155 14.50 3.53 21 4 .09 .3 .4 SEC 1.7X 67 3  
 2001 NOV 29 1444 42.33 19 23.11 155 14.50 3.57 19 5 .08 .3 .4 SEC 2.0X 105 3  
 2001 NOV 29 1509 52.70 19 31.48 155 41.80 4.46 28 6 .15 .5 5.1 MLO 1.6X 80 7  
 2001 NOV 29 1607 21.58 19 12.56 155 32.51 6.13 29 4 .23 .9 1.3 LSW 1.2X 132 6

2001 NOV 29 1619 32.77 19 18.13 155 28.39 30.76 23 6 .12 .8 1.2 DLS 1.2X 77 6  
 2001 NOV 29 2229 56.77 19 24.66 155 38.56 3.19 17 4 .10 .6 .4 MLO 1.5X 179 1  
 2001 NOV 30 0747 43.98 19 12.80 155 26.88 38.51 44 9 .08 .6 .9 DLS 1.6X 121 6  
 2001 NOV 30 0933 46.56 19 24.42 155 17.30 11.79 13 2 .10 1.2 .9 INTL 2.3X 74 1  
 2001 NOV 30 1128 28.42 19 59.45 155 32.92 7.01 4910 .14 .6 .7 KEAF 3.0X 134 24

ORIGIN TIME (HST)												PREF	N	AZ	MIN			
YEAR	MON	DA	HRMN	SEC	LAT	W	DEPTH	N	N	RMS	ERH	ERZ	LOC		MAG	RD	GAP	DS
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS		RD		

2001 NOV 30 1226 37.61 19 23.74 155 2.54 7.86 25 3 .13 .6 .6 SF5 1.4X 150 3  
 2001 NOV 30 1638 41.38 19 16.76 155 28.67 8.84 45 8 .15 .4 .7 LSW 1.9X 55 4  
 2001 NOV 30 1720 51.43 19 21.77 155 19.10 28.80 36 5 .12 .7 1.0 DEP 1.9X 40 4  
 2001 NOV 30 1736 6.49 19 16.60 155 28.76 10.43 25 3 .13 .5 1.1 LSW 1.4X 74 4  
 2001 NOV 30 1928 9.06 20 1.22 155 30.17 3.67 19 1 .11 1.1 2.0 KEA 1.8X 215 27

2001 NOV 30 2109 11.76 19 26.27 155 15.54 4.37 25 4 .12 .4 .9 SNCL 2.0X 131 4  
 2001 NOV 30 2119 3.36 19 43.60 155 46.54 18.85 17 3 .12 1.4 2.1 HUA 1.4X 236 8  
 2001 DEC 1 0127 8.02 19 12.42 155 26.55 38.87 24 4 .09 1.0 1.7 DLS 1.5X 135 6  
 2001 DEC 1 0444 13.94 18 54.04 155 12.63 11.69 20 4 .12 1.9 .7 LOI 1.6X 281 39  
 2001 DEC 1 1014 11.46 19 19.43 155 7.74 6.92 21 4 .08 .5 .9 SF4 1.0X 151 4

2001 DEC 1 1309 59.09 19 27.35 155 26.04 2.82 13 4 .13 .4 1.4 KAO 1.2X 64 7  
 2001 DEC 1 1524 59.38 19 30.54 155 0.45 13.22 32 8 .15 .5 .7 DEP 1.6X 114 10  
 2001 DEC 1 2341 28.48 19 21.98 155 4.47 6.96 27 4 .12 .5 1.0 SF5 1.4X 156 4  
 2001 DEC 2 0007 52.73 19 25.00 155 17.07 5.90 25 9 .12 .3 .4 INTL 2.0X 85 0  
 2001 DEC 2 0816 53.68 19 24.92 155 38.84 3.69 17 4 .14 .8 2.3 MLO 1.8X 188 6

2001 DEC 2 0828 44.45 19 14.26 155 20.95 29.75 22 6 .10 .9 1.2 DEP 1.5X 160 5  
 2001 DEC 2 1751 3.41 19 25.40 155 16.78 5.97 17 4 .12 .5 .6 INTL 2.3X 120 1  
 2001 DEC 2 2023 9.87 19 29.51 155 26.85 6.75 37 6 .10 .3 1.0 KAO 2.2X 64 5  
 2001 DEC 2 2143 23.90 19 27.83 155 24.03 9.70 26 7 .09 .4 1.0 KAO 1.4X 75 4  
 2001 DEC 3 0349 21.18 20 1.82 155 30.04 6.07 27 5 .14 .8 .8 KEA 1.7X 215 28

2001 DEC 3 0952 26.30 19 23.93 155 16.50 12.61 14 5 .06 .7 .5 INTL 2.6X 103 0  
 2001 DEC 3 1418 15.40 19 59.35 155 32.29 6.74 19 3 .15 .8 1.0 KEA 1.8X 176 23  
 2001 DEC 3 1649 32.46 19 16.89 155 28.07 11.03 30 3 .14 .5 1.0 LSW 1.6X 55 5  
 2001 DEC 3 1707 0.32 19 24.29 155 15.88 1.02 15 4 .09 .4 .4 SEC 1.9X 173 1  
 2001 DEC 4 0136 18.63 19 27.17 155 14.99 11.36 12 5 .11 1.3 .9 INTL 2.2X 229 5

2001 DEC 4 1232 10.76 19 15.67 155 15.16 7.08 27 3 .09 .6 .9 SF1 1.8X 203 4  
 2001 DEC 4 2214 2.78 19 19.43 155 10.86 6.18 25 2 .10 .5 1.2 SF3 1.3X 100 5  
 2001 DEC 5 0212 7.36 19 17.50 155 30.42 8.86 23 5 .14 .4 .8 LSW 1.2X 68 4  
 2001 DEC 5 0416 42.92 19 2.31 155 27.27 36.77 17 2 .10 1.5 2.1 DLS 1.2X 264 13  
 2001 DEC 5 0621 52.83 19 13.76 155 26.02 8.98 26 1 .10 .4 .6 LSW 1.4X 125 4

2001 DEC 5 1153 28.43 19 24.95 154 58.04 3.76 23 3 .14 1.0 .5 SLE 1.6X 188 1  
 2001 DEC 5 1314 9.84 19 59.91 155 32.35 6.13 20 5 .13 .7 .9 KEA 1.6X 180 24  
 2001 DEC 5 1723 52.71 19 57.64 155 26.70 36.95 14 4 .10 2.8 2.9 KEA 1.3X 331 40  
 2001 DEC 5 1841 44.45 19 23.12 155 14.64 2.86 39 8 .12 .2 .3 SEC 2.1X 78 3  
 2001 DEC 5 2123 35.06 19 20.90 155 19.05 1.41 19 7 .08 .3 .5 SWR .9X 89 5

2001 DEC 6 0113 36.56 19 16.56 155 7.32 6.60 27 2 .13 .9 .6 SF4 1.1X 217 2  
 2001 DEC 6 1600 41.00 19 16.23 155 30.92 10.21 30 4 .17 .4 .8 LSW 1.3X 57 3  
 2001 DEC 6 1911 10.68 19 19.48 155 11.80 6.01 25 4 .09 .4 1.1 SF3 1.2X 93 5  
 2001 DEC 6 2045 32.73 19 26.08 155 15.54 1.77 18 4 .12 .3 .5 SNC 1.5X 129 3  
 2001 DEC 7 1156 15.21 19 28.16 155 26.98 7.15 38 9 .11 .3 1.0 KAO 1.5X 47 7

2001 DEC 7 1302 25.08 19 24.80 155 16.08 8.56 22 5 .14 .8 .5 INTL 2.2X 115 2  
 2001 DEC 7 1333 25.12 19 22.31 155 28.58 14.21 18 3 .09 .6 1.1 DML 1.1X 78 2  
 2001 DEC 7 1800 12.22 19 25.89 155 16.00 3.32 12 4 .09 .8 .8 SNC 1.4X 136 3  
 2001 DEC 8 0432 20.28 19 13.89 155 25.80 7.68 21 3 .12 .4 .8 LSW 1.3X 130 3  
 2001 DEC 8 0549 52.20 19 29.27 154 53.56 0.03 4110 .15 .4 .2 SLEF# 2.5X 106 4

ORIGIN TIME (HST)												PREF	N	AZ	MIN			
YEAR	MON	DA	HRMN	SEC	LAT	W	DEPTH	N	N	RMS	ERH	ERZ	LOC		MAG	RD	GAP	DS
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS		RD		

2001 DEC 8 0650 8.90 19 28.41 154 53.62 2.61 19 2 .10 .4 .6 SLEF 2.1X 118 3  
 2001 DEC 8 1200 47.78 19 24.54 155 16.89 10.80 23 5 .10 .6 .7 INTL 2.3X 77 1  
 2001 DEC 8 1604 4.00 19 27.44 155 20.53 34.34 25 5 .11 2.0 1.3 DMLL 2.7X 125 0  
 2001 DEC 8 1605 5.83 19 27.77 155 15.20 7.31 22 1 .11 .5 1.1 INTL 2.2X 138 6  
 2001 DEC 8 1631 51.30 19 23.84 155 17.64 11.59 12 2 .12 1.5 1.1 INTL 1.9X 135 2

2001 DEC 8 1633 17.64 19 24.55 155 16.74 9.76 12 3 .07 1.1 .8 INTL 1.9X 120 1  
 2001 DEC 8 1635 44.66 19 22.52 155 19.21 8.03 13 4 .10 1.2 1.5 KAOL 2.0X 188 4  
 2001 DEC 8 1640 31.80 19 23.94 155 16.80 9.85 11 3 .07 1.1 1.1 INTL 2.3X 139 0  
 2001 DEC 8 1644 1.61 19 24.32 155 17.14 7.35 18 4 .09 .6 .6 INTL 2.2X 51 1  
 2001 DEC 8 1645 54.15 19 24.05 155 16.78 12.89 19 5 .16 .7 .9 INTL 2.1X 71 0

2001 DEC 8 1905 54.40 18 55.67 155 14.64 11.33 4110 .13 .9 .4 LOI 2.2X 244 34  
 2001 DEC 9 0011 22.89 19 29.08 155 42.90 0.81 24 6 .14 .4 .6 MLO 1.3X 109 6  
 2001 DEC 9 0116 24.27 19 19.77 155 7.75 8.24 20 3 .08 .5 .9 SF4 1.4X 128 4  
 2001 DEC 9 0140 46.27 21 20.99 157 14.46 0.91 33 8 .12 2.2 .2 DIS 3.2X 216 80  
 2001 DEC 9 0649 24.10 19 24.87 154 57.88 3.98 14 1 .09 1.5 .5 SLE 1.5X 190 2

2001 DEC 9 0819 58.35 19 17.55 155 12.97 6.48 34 8 .13 .4 .8 SF2 1.4X 130 1  
 2001 DEC 9 0931 25.42 19 23.52 155 15.32 2.73 15 5 .09 .3 .4 SEC 1.2X 139 2  
 2001 DEC 9 0936 1.09 19 25.27 155 16.38 6.80 12 5 .13 2.6 .9 INTL 2.2X 231 1  
 2001 DEC 9 0941 16.64 19 23.36 155 15.06 3.75 28 6 .11 .3 .4 SEC 2.1X 92 2  
 2001 DEC 9 0942 27.43 19 23.80 155 15.09 3.38 46 9 .11 .3 .3 SEC# 2.8X 43 2

2001 DEC 9 0949 39.66 19 24.31 155 16.11 1.42 10 3 .06 .4 .4 SEC 1.8X 172 1  
 2001 DEC 9 0954 58.34 19 24.31 155 16.07 1.20 13 6 .07 .4 .4 SEC 1.8X 173 1  
 2001 DEC 9 1519 55.76 19 26.19 155 37.07 30.60 19 5 .12 1.0 1.5 DML 1.5X 87 2  
 2001 DEC 9 1705 13.15 19 22.28 155 10.79 4.72 36 6 .12 .4 .7 SER 2.0X 66 2  
 2001 DEC 9 2054 30.78 19 23.43 155 18.34 16.35 16 3 .08 .9 .8 DEP 1.3X 121 2

2001 DEC 9 2201 14.47 19 21.69 155 11.10 2.80 19 5 .12 .4 .5 SER 1.5X 74 2  
 2001 DEC 9 2211 35.04 20 0.52 155 32.99 8.22 14 2 .13 1.5 .8 KEA 1.6X 220 27  
 2001 DEC 9 2253 19.45 19 27.68 155 13.69 17.27 15 3 .13 1.4 1.1 DEP 1.5X 261 8  
 2001 DEC 9 2333 37.14 19 25.56 155 17.27 10.57 19 3 .12 1.1 1.3 INT 1.3X 203 1  
 2001 DEC 9 2344 6.38 19 24.27 155 19.25 0.15 14 3 .14 .4 .4 KAO .9X 104 4

2001 DEC 10 0010 19.09 19 23.28 155 17.74 7.90 18 5 .13 .9 1.4 INT 1.1X 120 1  
 2001 DEC 10 0028 59.44 19 23.17 155 15.51 9.21 11 .10 1.4 1.0 INT 1.4X 123 2  
 2001 DEC 10 0320 56.11 19 24.18 155 17.06 8.45 13 2 .11 .9 1.2 INT 1.4X 108 1  
 2001 DEC 10 0358 43.15 19 9.46 155 26.23 32.06 23 2 .08 .9 2.0 DLS 1.3X 174 3  
 2001 DEC 10 0414 25.31 19 24.72 155 15.87 15.17 18 5 .08 .9 .4 DEP 1.5X 249 2

2001 DEC 10 0532 44.87 19 24.84 155 16.63 13.46 22 4 .11 .6 .5 DEP 1.7X 189 1  
 2001 DEC 10 0748 43.29 19 24.21 155 16.71 10.96 16 3 .10 1.2 1.4 INT 1.5X 192 2  
 2001 DEC 10 0836 45.20 19 48.44 156 3.41 30.82 14 3 .14 2.0 3.2 HUA 1.6X 259 26  
 2001 DEC 10 1103 51.06 19 23.04 155 14.88 3.21 15 4 .08 .3 .5 SEC 1.4X 70 2  
 2001 DEC 10 1631 56.58 19 45.48 155 30.77 10.79 17 2 .11 1.4 .8 KEA 1.5X 186 17

2001 DEC 10 1647 53.84 19 44.89 155 31.43 11.66 14 2 .11 1.3 .8 KEA 1.2X 226 8  
 2001 DEC 11 0657 40.75 20 0.43 155 31.44 2.43 12 3 .14 1.4 1.3 KEA 1.8X 227 26  
 2001 DEC 11 0709 2.72 19 20.98 155 52.21 9.11 16 2 .11 1.7 .9 KON 1.5X 286 21  
 2001 DEC 11 0844 48.57 19 21.75 155 18.95 29.33 22 7 .09 .8 1.0 DEP 1.1X 92 4  
 2001 DEC 11 1101 25.08 18 51.24 155 11.71 9.07 22 3 .12 1.4 .9 LOI 2.2X 260 44

		ORIGIN TIME (HST)												ORIGIN TIME (HST)																											
		YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
							DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP	DS		
8	2001	DEC	11	1313	14.36	19	10.70	155	27.72	5.97	17	2	.11	.7	.9	LSW	1.4X	138	2	2001	DEC	19	0915	51.41	19	23.01	155	14.85	3.72	31	7	.10	.3	.4	SEC	2.1X	91	2			
	2001	DEC	11	1923	16.43	19	18.76	155	12.94	5.09	35	6	.11	.3	1.0	SF2	1.3X	91	3	2001	DEC	19	0916	4.37	19	23.11	155	14.67	2.82	22	9	.11	.3	.3	SEC	2.1X	109	3			
	2001	DEC	12	0055	13.33	19	20.32	155	6.78	6.92	35	6	.11	.5	.8	SF4	1.5X	144	6	2001	DEC	19	1003	7.63	19	22.99	155	14.68	3.28	25	6	.09	.3	.3	SEC	1.9X	91	2			
	2001	DEC	12	0152	3.19	19	13.02	155	34.87	6.02	19	5	.11	.5	2.2	LSW	1.3X	134	9	2001	DEC	19	1124	46.39	19	23.11	155	14.74	3.44	15	4	.06	.4	.4	SEC	1.6X	131	2			
	2001	DEC	12	0533	40.92	20	44.76	155	27.34	3.64	22	3	.09	2.4	2.4	DIS	2.6X	248	88	2001	DEC	19	1241	16.27	19	20.19	155	7.17	7.10	42	6	.10	.4	.6	SF4	2.7X	131	5			
	2001	DEC	12	1147	39.22	19	10.07	155	40.69	3.43	33	5	.19	.6	2.0	LSW	1.8X	86	9	2001	DEC	19	1337	10.89	19	49.75	156	5.20	41.84	27	5	.10	1.4	2.2	HUA	1.8X	249	30			
	2001	DEC	12	1159	55.84	19	22.04	155	4.72	7.96	27	2	.11	.6	.8	SF5	1.4X	153	4	2001	DEC	19	1414	17.63	19	27.42	154	53.54	7.60	21	3	.10	.0	.9	LER	1.3X	152	3			
	2001	DEC	12	2105	59.92	19	18.91	155	9.58	2.42	16	3	.11	.4	.8	SSF	1.1X	108	4	2001	DEC	19	1553	55.39	19	43.63	156	5.19	45.33	24	6	.09	1.1	1.9	HUA	1.9X	194	41			
	2001	DEC	12	2216	46.61	19	44.48	156	6.56	45.83	17	4	.08	1.6	1.8	HUA	1.7X	221	44	2001	DEC	19	1601	31.00	19	15.42	155	29.94	9.62	14	3	.09	.5	.8	LSW	1.1X	96	1			
	2001	DEC	13	0612	25.61	19	27.32	155	14.06	31.07	4810	.12	.6	.8	DEP	2.1X	71	7	2001	DEC	19	1632	56.83	19	15.66	155	28.55	10.99	30	4	.12	.4	.9	LSW	1.5X	75	3				
9	2001	DEC	13	1036	7.84	19	19.05	155	11.88	6.17	26	6	.10	.4	1.0	SF3	1.5X	103	5	2001	DEC	19	1949	0.14	19	17.20	155	27.24	9.74	18	4	.09	.5	1.0	LSW	1.1X	52	6			
	2001	DEC	13	1413	44.50	19	17.99	155	13.26	8.11	32	5	.12	.5	.5	SF2	1.7X	95	2	2001	DEC	19	2326	17.12	19	19.83	155	7.06	7.83	36	5	.08	.4	.5	SF4	2.1X	136	5			
	2001	DEC	14	0034	52.93	19	20.30	155	8.80	7.23	31	7	.12	.4	.7	SF4	1.5X	101	4	2001	DEC	20	0233	28.11	19	53.73	155	10.67	7.20	15	5	.17	1.6	1.0	KEA	1.4X	313	32			
	2001	DEC	14	0803	43.40	19	18.77	155	15.50	6.32	21	5	.08	.4	1.3	SF1	1.3X	110	5	2001	DEC	20	0339	1.94	19	26.36	155	21.47	13.04	18	5	.08	.5	1.0	DML	1.0X	74	3			
	2001	DEC	14	1545	31.05	19	17.05	155	24.15	34.54	4311	.10	.6	.9	DEP	1.3X	116	6	2001	DEC	20	0445	23.33	19	24.79	155	28.95	9.31	39	5	.14	.5	1.3	KAO	1.1X	66	5				
	2001	DEC	14	1637	8.82	19	39.13	156	2.64	45.78	3110	.10	1.1	1.6	HUA	2.0X	284	33	2001	DEC	20	1529	24.85	19	22.43	155	30.08	10.12	30	2	.09	.4	.9	KAO	1.9X	35	4				
	2001	DEC	14	1728	48.59	19	24.94	155	19.23	7.57	14	4	.09	.9	1.4	KAO	.9X	111	3	2001	DEC	20	2020	1.81	19	19.51	155	8.91	7.11	16	2	.07	.5	1.1	SF4	1.3X	114	4			
	2001	DEC	14	1751	6.95	19	23.12	155	10.34	43.67	40	9	.12	.7	.8	DEP	2.0X	70	2	2001	DEC	20	2121	39.98	19	19.44	155	8.78	5.88	20	2	.10	.6	1.5	SF4	1.3X	100	4			
	2001	DEC	15	0012	19.72	19	27.89	155	51.62	8.00	22	4	.19	1.0	1.0	KON	1.3X	202	11	2001	DEC	20	2200	37.86	19	20.28	155	12.07	7.24	17	1	.09	.5	1.1	SF3	1.6X	77	5			
	2001	DEC	15	0112	26.28	19	19.65	155	11.89	6.49	36	8	.11	.4	.6	SF3	1.5X	89	6	2001	DEC	20	2322	45.02	19	21.21	155	16.52	1.66	39	6	.10	.2	.4	KOA	2.4X	67	2			
9	2001	DEC	15	0240	15.91	19	23.57	155	55.70	9.57	18	3	.19	1.7	1.0	KON	1.4X	266	21	2001	DEC	21	0024	45.24	19	23.14	155	16.91	2.57	31	8	.12	.3	.2	SSC	1.8X	64	0			
	2001	DEC	15	1055	46.36	19	17.19	155	24.31	38.15	19	3	.12	1.3	1.5	DEP	1.2X	156	5	2001	DEC	21	0322	31.77	19	21.88	155	29.94	9.47	39	7	.12	.3	.8	KAO	1.8X	37	4			
	2001	DEC	15	1443	11.88	19	18.80	155	11.66	6.58	38	6	.13	.4	.6	SF3	2.1X	113	5	2001	DEC	21	0517	52.81	18	53.86	155	14.69	13.10	35	7	.13	1.0	.9	LOI	2.1X	254	37			
	2001	DEC	16	0252	14.54	19	24.07	155	29.32	10.53	22	4	.11	.5	1.0	KAO	1.2X	42	4	2001	DEC	21	0542	51.03	19	18.35	155	13.81	7.54	19	1	.11	.6	1.3	SF2	1.5X	100	3			
	2001	DEC	16	0543	55.18	19	10.97	155	26.59	47.92	18	3	.08	1.4	2.2	DLST	2.1X	201	8	2001	DEC	21	0722	7.40	19	26.87	155	27.30	14.01	45	9	.10	.4	.4	DML	1.9X	43	8			
	2001	DEC	16	1446	29.13	19	11.89	155	41.62	6.22	22	3	.19	.7	4.7	LSW	1.9X	131	9	2001	DEC	21	0731	51.02	19	21.15	155	16.87	1.25	13	4	.06	.3	.5	KOA	1.3X	89	3			
	2001	DEC	16	1629	28.84	19	29.17	155	1.38	46.66	35	7	.11	.8	1.0	DEP	1.8X	101	9	2001	DEC	21	1819	28.81	19	44.42	155	33.75	15.75	15	3	.05	1.0	.9	KEA	1.5X	169	17			
	2001	DEC	16	1921	34.04	20	2.13	155	25.89	9.1	1.24	13	2	.09	3.1	1.6	KEA	1.5X	302	28	2001	DEC	21	1838	41.06	19	27.03	155	27.51	9.74	25	4	.09	.4	1.1	KAO	1.8X	56	8		
	2001	DEC	16	1922	26.54	20	1.48	155	29.89	6.18	16	4	.10	.9	.7	KEA	1.7X	284	27	2001	DEC	21	1857	48.78	19	14.11	155	31.89	0.57	4210	14	.4	.3	LSW	2.1X	119	14				
	2001	DEC	16	1927	46.97	20	0.30	155	30.36	4.49	13	3	.11	1.1	1.7	KEA	1.3X	299	25	2001	DEC	21	1948	13.87	19	25.82	155	12.64	16.25	13	2	.11	1.9	1.0	DEP	1.6X	282	8			
9	2001	DEC	17	0050	6.41	19	59.38	155	30.95	5.27	35	6	.10	.6	.8	KEA	2.3X	181	32	2001	DEC	21	2052	25.54	19	19.65	155	7.38	5.87	15	.09	1.1	2.0	SF4	1.2X	161	4				
	2001	DEC	17	0547	53.05	19	19.79	155	8.58	7.95	29	4	.11	.4	.7	SF4	1.8X	106	5	2001	DEC	22	0202	54.67	19	21.10	155	4.04	7.19	30	6	.12	.5	.5	SF5	1.6X	173	6			
	2001	DEC	17																																						

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	GAP	DS
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD					

2001 DEC 23 0043 50.24 19 24.48 155 29.93 10.44 40 7 .09 .3 .6 KAO 1.8X 34 5  
 2001 DEC 23 0303 10.23 19 21.12 155 17.03 0.83 16 2 .09 .3 .6 SWR 1.4X 72 3  
 2001 DEC 23 0406 17.28 19 15.30 155 26.23 9.78 20 2 .07 .5 .6 LSW 1.1X 82 4  
 2001 DEC 23 0519 8.93 19 32.58 155 53.78 10.24 17 3 .19 1.8 .7 KON 1.1X 218 14  
 2001 DEC 23 0551 40.21 19 15.44 155 27.19 9.87 25 3 .12 .4 .8 LSW 1.6X 77 5  
  
 2001 DEC 23 0639 6.85 19 22.17 155 11.18 3.37 17 2 .08 .6 .5 SER 1.7X 127 2  
 2001 DEC 23 0914 17.21 20 4.33 156 11.74 4.88 22 3 .17 1.1 2.1 KOH 2.0X 190 44  
 2001 DEC 23 1223 10.61 19 24.48 155 16.61 1.31 16 6 .12 .5 .2 SSC 1.5X 160 1  
 2001 DEC 23 1611 49.23 19 33.21 155 38.38 13.38 18 5 .13 .9 1.5 DML 1.2X 180 6  
 2001 DEC 23 1638 25.08 19 23.17 155 16.97 3.01 37 7 .11 .3 .3 SSC 2.1X 37 0  
  
 2001 DEC 23 1919 3.31 19 58.60 155 27.74 13.97 17 2 .13 2.9 5.5 KEA 1.4X 252 41  
 2001 DEC 23 2011 37.27 19 18.81 155 13.15 9.52 36 4 .12 .5 .6 SF2 1.8X 131 7  
 2001 DEC 23 2233 21.29 19 8.85 155 39.51 7.91 4411 16 .4 .7 LSWF 3.0X 97 11  
 2001 DEC 24 0106 10.74 19 14.58 155 34.66 8.38 28 3 .13 .4 1.3 LSW 1.8X 80 8  
 2001 DEC 24 1126 45.98 19 21.18 155 16.34 1.88 15 5 .07 .3 .4 KOA 1.3X 84 2  
  
 2001 DEC 24 1332 54.38 19 31.87 155 3.10 43.34 38 7 .10 .8 1.2 DEP 2.0X 113 14  
 2001 DEC 24 1341 12.81 19 24.51 155 15.48 14.33 13 1 .12 1.9 .9 DEP 1.1X 245 2  
 2001 DEC 24 1406 0.29 19 18.70 155 1.80 32.49 23 2 .11 1.9 2.2 DEP 1.3X 218 11  
 2001 DEC 24 1946 41.41 19 9.17 155 39.02 2.69 14 1 .13 .6 2.7 LSW 1.0X 97 12  
 2001 DEC 24 2316 12.69 20 1.27 155 29.44 7.17 17 2 .10 1.2 .9 KEA 1.8X 234 27  
  
 2001 DEC 25 0055 7.30 19 20.18 155 50.96 12.07 28 4 .12 1.1 .6 KON 1.9X 205 19  
 2001 DEC 25 0104 45.75 19 22.59 155 14.16 3.59 12 4 .04 .6 .5 SEC 1.4X 137 2  
 2001 DEC 25 0437 55.49 19 19.63 155 6.66 7.53 21 1 .08 .5 .8 SF4 1.3X 155 5  
 2001 DEC 25 0820 25.70 19 21.05 155 16.02 1.07 22 5 .09 .2 .3 KOA 1.7X 71 3  
 2001 DEC 25 0830 17.81 19 24.02 155 26.49 10.05 41 6 .09 .3 .6 KAO 1.9X 33 3  
  
 2001 DEC 25 0945 42.90 20 3.26 156 37.88 7.53 19 7 .17 1.5 2.5 DIS 3.2X 239 79  
 2001 DEC 25 1007 55.90 19 13.88 155 29.28 8.44 16 1 .11 .5 1.0 LSW 1.1X 92 3  
 2001 DEC 25 1552 8.02 19 22.49 155 14.18 3.07 15 4 .06 .3 .3 SEC 1.4X 130 2  
 2001 DEC 25 1655 12.28 19 34.81 155 0.55 42.97 4413 .06 .9 .6 HIL 2.0X 202 16  
 2001 DEC 25 1932 9.40 20 47.41 155 55.72 5.96 15 3 .14 9.412.8 DIS - 1.6U 343122  
  
 2001 DEC 25 2154 59.01 19 23.72 155 54.22 12.99 18 2 .10 1.8 .6 KON 1.4X 299 19  
 2001 DEC 25 2216 38.56 19 58.60 155 35.05 44.75 40 7 .10 .9 1.2 KOH 1.9X 167 25  
 2001 DEC 26 0118 26.88 19 25.45 155 14.86 2.36 17 5 .09 .3 .7 SNC 1.4X 168 4  
 2001 DEC 26 0420 49.18 19 18.47 155 30.05 5.78 41 7 .14 .3 1.2 LSW 1.9X 49 6  
 2001 DEC 26 0443 58.38 19 34.67 155 45.58 0.64 16 3 .10 .4 .6 KON 1.3X 141 8  
  
 2001 DEC 26 0453 40.38 20 25.33 155 59.42 24.73 40 5 .10 1.4 2.5 DIS 2.3X 174 39  
 2001 DEC 26 0536 14.45 19 18.28 155 30.36 10.07 26 4 .11 .4 .7 LSW 1.3X 64 6  
 2001 DEC 26 0733 4.96 19 25.14 155 15.44 3.10 18 5 .10 .5 .4 SNC 1.5X 170 2  
 2001 DEC 26 0922 9.45 20 51.91 156 20.73 34.12 27 1 .15 3.1 .6 DIS 2.9X 205 15  
 2001 DEC 26 1142 25.89 19 20.08 155 11.68 8.78 43 7 .12 .3 .4 SF3 2.2X 82 5  
  
 2001 DEC 26 1526 18.26 19 12.62 155 18.90 45.49 40 6 .11 .8 1.3 DEP 1.9X 171 10  
 2001 DEC 26 2033 12.70 19 20.42 155 11.26 7.53 34 5 .13 .5 .7 SF3 1.7X 78 4  
 2001 DEC 26 2245 50.70 19 25.26 155 14.08 0.90 14 5 .13 .5 .7 SNC 1.4X 194 5  
 2001 DEC 27 0037 20.50 19 54.91 155 26.58 26.23 4210 .10 .7 1.1 KEA 1.7X 174 15  
 2001 DEC 27 0232 28.25 19 19.53 155 20.08 35.58 17 2 .12 1.0 1.7 DEP 1.3X 90 4

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	GAP	DS
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD					

2001 DEC 27 0627 32.67 19 50.30 155 39.67 9.83 13 4 .09 1.1 .9 KEA 1.4X 273 25  
 2001 DEC 27 0710 29.22 19 48.80 155 50.45 5.82 15 2 .08 .7 1.2 HUA 1.4U 191 14  
 2001 DEC 27 0745 34.02 19 26.25 155 30.65 12.08 24 4 .09 .4 1.2 KAO 1.4X 62 5  
 2001 DEC 27 1040 16.83 19 46.12 155 39.77 11.08 21 3 .15 1.3 .6 KEA 1.4X 227 26  
 2001 DEC 27 1239 12.18 19 20.46 155 4.82 4.60 35 6 .13 .6 1.4 SSF 1.7X 163 7

2001 DEC 27 1650 57.07 19 21.03 155 6.31 8.89 30 5 .08 .4 .5 SF4 1.7X 138 5  
 2001 DEC 28 0331 10.74 19 20.06 155 13.33 4.82 21 2 .13 .4 1.5 SSF 1.0X 66 5  
 2001 DEC 28 0400 8.66 19 20.45 155 7.44 7.20 26 4 .08 .4 .6 SF4 1.2X 129 5  
 2001 DEC 28 1211 53.81 19 19.15 154 59.95 37.06 14 3 .08 1.5 .9 LER .9X 246 11  
 2001 DEC 28 1813 31.10 19 21.28 155 30.49 9.39 32 4 .12 .4 .9 KAO 1.5X 55 6

2001 DEC 28 2043 0.31 19 24.18 155 27.21 4.18 21 2 .11 .4 1.1 KAO 1.3X 61 3  
 2001 DEC 28 2044 49.62 19 19.83 155 9.94 6.44 37 4 .13 .5 .9 SF3 1.8X 89 4  
 2001 DEC 28 2114 6.98 19 21.95 155 4.67 6.96 17 1 .12 .7 1.3 SF5 1.3X 155 5  
 2001 DEC 28 2235 1.97 20 3.90 155 33.36 10.86 14 3 .15 8.911.6 KEA - 1.6X 323 51  
 2001 DEC 29 0320 5.44 19 19.07 155 10.07 6.15 18 2 .07 .5 1.4 SF3 1.4X 108 5

2001 DEC 29 1048 2.22 19 29.41 155 35.42 1.80 9 1 .12 .8 .6 MLO 1.7X 110 1  
 2001 DEC 29 1234 5.70 20 4.96 155 38.95 33.65 15 4 .10 1.4 2.2 KOH 1.5X 292 39  
 2001 DEC 29 1313 25.17 19 24.42 155 29.03 10.69 18 3 .09 .5 .9 KAO 1.5X 67 4  
 2001 DEC 29 2246 13.11 19 11.44 156 26.43 36.34 34 6 .11 1.4 2.3 DIS 2.4X 303 71  
 2001 DEC 30 0252 48.57 19 27.60 155 29.01 10.48 17 3 .09 .5 1.4 KAO 1.6X 70 8

2001 DEC 30 0317 4.54 19 26.49 155 28.79 10.68 16 3 .10 .6 1.5 KAO 1.1X 85 8  
 2001 DEC 30 1027 6.64 19 12.40 155 28.61 7.36 31 9 .16 .5 1.3 LSW 1.5X 144 6  
 2001 DEC 30 2027 29.30 19 32.34 155 57.50 13.11 13 2 .13 2.6 .9 KON 1.1X 318 21  
 2001 DEC 30 2212 22.05 19 28.46 155 57.44 10.22 12 2 .07 1.7 .7 KON 1.0X 320 21  
 2001 DEC 31 0038 54.68 19 19.81 155 12.79 4.81 28 3 .13 .4 1.7 SSF 1.1X 76 5

2001 DEC 31 0104 3.28 19 54.56 155 10.04 40.21 39 9 .10 .9 1.3 KEA 2.1X 267 27  
 2001 DEC 31 0719 46.17 19 22.60 155 14.94 3.01 12 3 .10 .5 .4 SEC 1.3X 126 2  
 2001 DEC 31 1425 29.22 19 18.32 155 17.92 44.64 20 6 .09 1.7 1.0 DEP 1.2X 129 1  
 2001 DEC 31 1509 57.13 19 32.08 155 42.73 9.94 20 4 .14 1.3 1.2 MLO 1.3X 265 13  
 2001 DEC 31 1807 7.03 19 10.27 155 31.11 6.74 25 7 .12 .6 1.6 LSW 1.4X 219 6

2001 DEC 31 2203 24.92 19 20.81 155 6.58 6.78 37 6 .12 .5 .6 SF4 2.3X 136 5

**Table 5.**

YEAR	MON	DA	HRSN	SEC	LAT N DEG	LON W DEG	DEPTH KM	N RD S	N SEC	RMS KM	ERH ERZ LOC	PREF KM REMKS	MAG	N RD	AZ GAP	MIN DS
2001	JAN	2	0654	48.77	19 45.40	155 33.79	14.71	42	7	.12	.4	.4 KEAF	3.2X	112	11	
2001	JAN	9	2236	26.91	19 46.87	155 22.74	27.22	44	8	.11	.6	1.2 KEAF	3.3X	162	8	
2001	FEB	15	2153	55.69	19 30.13	155 24.54	23.71	5111		.11	.4	.7 DML	3.2X	51	2	
2001	FEB	16	1743	55.49	19 29.67	155 24.82	24.19	50	9	.11	.4	.7 DMLF	3.3X	51	3	
2001	FEB	19	0200	30.59	19 16.04	155 7.01	43.76	43	8	.12	.9	1.0 DEP	3.2X	190	3	
2001	FEB	20	1317	53.36	19 23.57	155 14.99	3.42	4610		.11	.3	.3 SECF	3.8U	82	2	
2001	APR	15	1309	39.21	19 57.20	157 38.36	0.01	4411		.11	5.7	1.4 DIS #	3.2X	299157		
2001	APR	16	0418	1.57	19 47.31	155 32.43	23.84	49	8	.11	.4	1.2 KEAF	3.3X	94	9	
2001	APR	25	1737	39.35	19 25.44	155 18.28	6.34	45	5	.11	.3	.5 INTF	4.4U	37	1	
2001	APR	25	1819	24.80	19 25.48	155 18.30	6.22	46	7	.11	.3	.4 INTF	4.0U	37	1	
2001	MAY	9	0433	56.80	19 56.43	155 55.27	15.09	50	7	.11	.6	1.1 KOHF	3.0X	152	26	
2001	MAY	31	0802	0.36	19 21.28	155 15.53	26.64	5110		.12	.5	.6 DEPF	3.1X	67	2	
2001	MAY	31	2126	37.82	19 5.07	155 22.13	34.36	4710		.10	.8	1.1 LOIF	3.3X	199	17	
2001	JUN	1	2016	42.29	19 15.64	155 27.14	10.76	44	7	.13	.4	.4 LSWF	3.8U	138	5	
2001	JUN	17	2059	38.09	19 48.30	156 9.91	35.97	50	8	.11	.8	1.2 HUA	3.2X	196	22	
2001	JUL	21	0801	7.85	18 53.65	155 15.84	12.54	42	6	.11	1.0	1.3 LOI	3.4X	265	41	
2001	AUG	10	2214	17.58	19 12.42	155 34.98	10.96	4610		.12	.4	.6 LSWF	4.5U	121	10	
2001	SEP	4	0307	47.58	19 22.85	155 19.38	30.43	5415		.12	.5	.6 DMLF	3.2X	74	4	
2001	SEP	7	1507	37.15	19 46.11	155 43.02	18.13	45	8	.13	.6	2.5 KEAF	3.3X	116	16	
2001	SEP	10	1409	21.54	18 52.60	155 15.66	12.97	40	3	.12	1.3	1.5 LOIF	4.7U	253	38	
2001	SEP	10	1433	6.31	18 53.28	155 15.01	12.55	45	9	.11	.9	1.0 LOI	3.0X	251	37	
2001	SEP	10	1554	44.68	18 51.06	155 14.64	12.05	44	9	.11	1.2	1.4 LOI	3.2X	259	41	
2001	SEP	10	1832	15.12	18 48.88	155 14.18	10.53	4511		.13	1.1	1.2 LOI	3.3X	276	45	
2001	SEP	10	1843	20.24	18 53.38	155 15.01	12.56	45	7	.11	.9	.9 LOI	3.2X	251	37	
2001	SEP	11	0345	40.30	18 51.74	155 9.45	8.59	4412		.13	.9	.6 LOI	3.3X	259	46	
2001	SEP	13	0311	45.35	18 50.61	155 15.15	11.91	35	4	.12	1.3	1.3 LOIF	4.9U	273	41	
2001	SEP	13	0839	54.17	18 52.92	155 12.12	9.86	41	6	.16	1.5	1.1 LOI	4.4U	254	41	
2001	OCT	23	2338	22.98	19 23.69	155 29.45	10.32	46	8	.10	.3	.4 KAOF	3.0X	33	4	
2001	NOV	30	1128	28.42	19 59.45	155 32.92	7.01	4910		.14	.6	.7 KEAF	3.0X	134	24	
2001	DEC	9	0140	46.27	21 20.99	157 14.46	0.91	33	8	.12	2.2	.2 DIS	3.2X	216	80	
2001	DEC	23	2233	21.29	19 8.85	155 39.51	7.91	4411		.16	.4	.7 LSWF	3.0X	97	11	
2001	DEC	25	0945	42.90	20 3.26	156 37.88	7.53	19	7	.17	1.5	2.5 DIS	3.2X	239	79	